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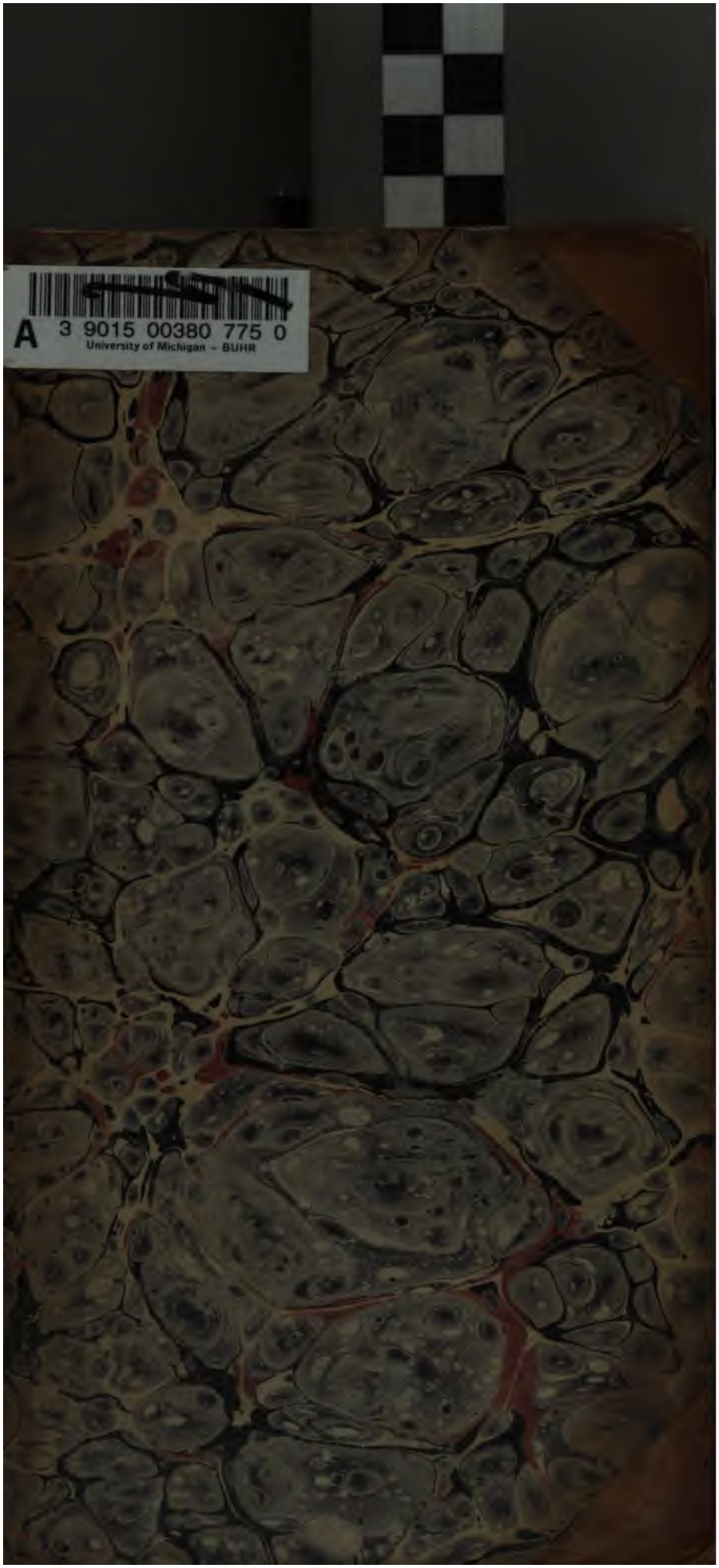
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[BEING VOL. XVI. of ANALYTICAL SERIES.]

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&c. &c. &c.

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"Occurrat mentemque domat respectus honesti."—CLAUD.

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INTELLIGENCE, CORRESPONDENCE, &c.

The Hospital Report of an interesting case, by Dr. Thwaites, is received, and will appear in the Clinical Review.

The offer from Edinburgh respecting the Review of a valuable publication lately issued from the Northern press, is declined, because the reviewer of the said work was already selected.

Many letters have been received during the last quarter on the business of the Journal, and which should have been privately answered, but the absence of the Editor on the Continent prevented punctuality. It is now too late to notice some of them, and Dr. J. will answer the others by post as soon as leisure permits.

Dr. ARMSTRONG.—It is to be particularly remembered that the notice of this lamented physician, which was drawn up in the course of one evening, makes no pretence to a biography—but merely to a sketch of Dr. Armstrong's professional character, with some reflexions on his short, but eventful life. Doubtless, some of his friends will give a more detailed account of the life and writings of that talented physician, whose premature death has left a widow and large family to deplore his loss.

*** We understand the Pupils of his Class are entering into a Subscription for a Bust, or other Memento, of their late Master.

We beg leave to inform Mr. Cowell, aad several others, that the Journal cannot be forwarded to distant parts by the London publisher. It must be procured by the subscribers themselves, through the medium of their own booksellers.—The same answer to Mr. Wood, the American re-publisher.

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THE

Medico-Chirurgical Review,

No. XXIII.

OCTOBER 1, 1829, TO JANUARY 1, 1830.

I.

A Pathological Inquiry into the Secondary Effects of Inflammation of the Veins. By *James M. Arnott*, Surgeon.

[Medico-chirurgical Transactions, Vol. XV. Part I.]

Many of our readers are probably acquainted with the story of Rosicrusius' sepulchre. That would-be philosopher, and founder of the Rosicrusian sect, having re-invented, or affirmed that he had re-invented, the ever-burning lamps of the ancients, placed one in a tomb, but contrived a piece of clock-work which dashed it into a thousand pieces on the approach of a person who wished to examine it. This desire to monopolize knowledge is not and was not confined to a miserable sect, but cleaves very often to the strongest mind, and has shewn itself in all ages, from those of the Stagyrite to the nineteenth century. Alexander the Great wrote a letter of expostulation to Aristotle on that philosopher's publishing some portion of his writings, and the conqueror of Asia from the Hellespont and Jaxartes to the Indian Ocean and the Ganges was mean enough to complain somewhat peevishly that his instructor had made known to all the world those secrets in learning, which he had before communicated to him in private lectures. Whatever may be the faults of Journalism, to borrow a term from the Polignac vocabulary, it is any thing but Rosicrusian in its spirit or its practice, and if learning was beginning to be deemed a common strumpet in the days of the Spectator, what shall we say to the lady's character now? Thanks to the periodical press, her embraces are enjoyed by the "camp, pioneers and all!" We are not about to enter into general or political considerations respecting the value of periodical literature, for they neither suit our purpose nor our taste, but we may offer a few remarks on our own more peculiar department. We do believe that the medical journals have done and are doing a great deal for the profession, not only in diffusing information but in diffusing the taste for acquiring it; insulated facts are collected, collated, and canvassed, the substance of ponderous and expensive books is laid in a cheap form on the table of every man, the practitioner in the country becomes acquainted with the professional transactions of the town, and in fine the journals become a kind of galvanic medium connecting in some sort the disjecta membra of the body medical. It would also be idle to deny that the periodical press exercises a very material influence on the minds of the profession at large, and that if properly and ably conducted, its powers will be daily augmented. It is well for all concerned

when that influence and those powers are directed to their just and constitutional ends—the improvement of their science. When made a vehicle of rancour and personal or party violence, the press becomes a nuisance and a curse to the community which it infests.

Our object has ever been, and so long as we are journalists ever will be, to make ourselves as useful to the *state* as our poor abilities will permit, and to do what we deem to be right, no matter how or whom it may displease. Whilst others were engaged in "bloody brawl," we have held on, as far as circumstances permitted, the even tenour of our way, careless of the venomous assault of the gladiatorial desperado, or the seducing blandishments of too aristocratic bodies. The event has proved that we were right, and the sound sense of the members of the profession has shown them that their real interests are better consulted by cultivating scientific investigations, than by cutting each other's throats, albeit in a literary way.

Having made these few preliminary observations, we shall enter on the more immediate subject of the present article. We are certainly not distinguished by an opposition to the cultivation of pathology, as it is called—quite otherwise; but we have also raised our voices more than once against the pathologic bigots, for they are many, of the present day. The scalpel is an excellent thing in its way, but it is not the Alpha and Omega of medicine, it is not that devilish and charmed elixir, which the alchemists of modern morbid anatomy are vain enough to think it. Before we go farther we shall place on record an opinion of Laennec, as genuine and sound a pathologist as ever graced the annals of our science.

"The study of pathological anatomy," says that great man, "in making us acquainted with the existence of important organic lesions in many cases in which practitioners, too much addicted to the exclusive observation of symptoms, saw only cachexies, or alterations of the fluids, or at least nervous affections, has made us fall gradually into an error of an opposite kind; and among the present race of our pupils, many are as little disposed to acknowledge any nervous diseases besides the organic affections of the nerves, brain, and spinal marrow, as to admit any primary morbid changes in the fluids of the animal body. Nevertheless we are bound to admit that every disease in which we can discover no constant lesion of the solids nor evident alteration in the fluids, must consist in some disorder of the nervous influence."

We may see hereafter whether these remarks apply to any part of the "Memoir on the Secondary Effects of Inflammation of the Veins," which forms the text of this review. No two subjects, perhaps, have attracted more attention within the last few years than inflammation of the veins, and the purulent depôts in internal parts, which follow great operations and injuries:—the hospitals teemed, the societies were bored, and the journals filled with them. On the Continent they attracted nearly as much attention as here, and the several memoirs of Velpeau attest the attention bestowed on these cases in the Perfectionnement and other hospitals of Paris. Those who like every thing by starts and nothing long, grew tired of the investigation and expressed disgust at what they considered and termed the sameness and monotony of the subject, but all who took a genuine interest in scientific questions sympathized with the zeal and perseverance evinced on the occasion, zeal and perseverance which bade fair to throw some light on the difficult subject they encountered. This reasonable expectation has not

been deceived, and we now possess a mass of information on what used to be considered by all, and is still considered by many, a most obscure class of affections, which does honor to the labours of the investigators and is highly important to their brethren in practice. No one has distinguished himself more by patient research, ingenuity, and industry, than the author of the memoir before us, Mr. Arnott, to whom we gladly pay a tribute hardly earned and justly due. If we find occasion hereafter to differ from him in opinion we shall do so with candour and respect, sensible that though placed in the critical chair we are not on that account to dogmatize and bully, or promulgate our opinions as infallible. The following are the reasons which induced our author to commence his inquiry into the secondary effects of inflammation of the veins.

"A degree of doubt seeems still to prevail as to the cause of the alarming constitutional affection frequently attendant on Inflammation of the Veins, and much obscurity unquestionably exists, with regard to the origin of those abscesses and inflammations in distant parts which sometimes occur after injuries. An attempt to remove the one, and to dispel a portion of the other, may not therefore be considered as altogether unworthy of notice.

"My attention was more particularly called to this subject, by some occurrences which marked the course and termination of three fatal cases of inflammation of the veins after venesection, which I had an opportunity of observing. In one of these, a deposition of pus, without signs of previous inflammation, took place under the skin of the opposite fore-arm; in another destructive inflammation of the knee-joint, with a deposition of pus into the cellular substance of the thigh; and in the third, collections of matter at several points in the substance of the lungs; while in all three, the inflammation of the vein did not extend to the heart. These circumstances suggested inferences as to the cause and nature of the constitutional affection in cases of Phlebitis, and views with regard to the origin of abscesses in remote situations arising from injuries, which led to an examination of the evidence on both these subjects, to be found in the writings and observations of others. The results of this investigation I submit to the Society." 2.

Mr. Arnott divides his paper into two parts, the first of which treats of inflammation of the veins, the second of the purulent depositions in the viscera, joints, and cellular texture after injuries, operations, and parturition. An appendix containing a case of phlebitis with a deposition of pus into the substance of the heart, communicated by Mr. Lawrence, concludes the memoir. The mere classification evinces a desire to connect and group together affections that were formerly deemed to be remote, or at all events had no such propinquity stamped upon them. Phlebitis, the traumatic depôts, and phlegmatia dolens will be found by and bye as we deepen in this memoir to be fraternally related in the author's mind. In the first part which treats exclusively of phlebitis, Mr. Arnott commences by an abregé of the opinions of authors on the disease, then details seventeen cases collected from various sources, makes observations on those cases, proceeds to the enumeration of the secondary consequences of phlebitis, and finishes by remarks on those sequelæ. We believe that this is as good an arrangement as any that could be adopted, as the facts are first spread before the reader, and the inferences that follow are more justly and more readily appreciated. It is the plan adopted by the best practical writers, for although it affords a narrow field for flights of fancy and freaks of imagination, it is more conducive to sober and sound demonstration.

Mr. Hunter remarks that, "in all cases where inflammation of veins runs high, or extends itself considerably, *it is to be expected that* the whole system will be affected. For the most part, the same kind of affection takes place which arises from other inflammations, with this exception, that when no adhesions of the sides of the vein are formed, or where such adhesions are incomplete, pus passing into the circulation may add to the general disorder and even render it fatal."* In referring to the inflammation of the jugular vein in horses which he had often seen, Mr. Hunter professes himself at a loss to determine whether the extension of the inflammation to the heart or the intermixture of the morbid venous secretion with the blood was the cause of death. Mr. Abernethy, who had not seen a case of suppuration in the vein, transcribed the opinions of Mr. Hunter respecting the dangerous mixture of the pus and blood, and likewise stated that when the phlebitis is extensive much symptomatic fever will *probably* ensue, not merely from the inflammation per se, but also, "*because irritation* will be continued along the membranous lining of the vein to the heart."† Mr. Arnott cites this passage as proving that Mr. Abernethy gave a fillip to the doctrine of his master, and assumed of *actual* occurrence what the other considered as merely *possible*. We think Mr. Arnott has been hasty in his accusation, for Mr. Abernethy after all only rates the extension of the *irritation* by continuity as a *probable* cause of the fatal event; irritation too is not inflammation, and Mr. A. selects the former expression.

Mr. Hodgson affirms that the inflammation extends "in some instances even to the membrane which lines the cavity of the heart," and that the symptoms bear a striking likeness to those of typhus fever.‡ Mr. H. considers that this typhoid type may arise either from the extent of the inflamed surface, or from the intermixture of the pus and blood. Mr. Travers distinguishes the cases where phlebitis ends in the deposition of lymph, and those in which it causes the formation of pus; the former sometimes extending, it is said, to the heart, terminating in a few days with typhoid symptoms, and never in his opinion recovered from; the latter producing hectic ending in exhaustion, but not so fatal as the former. Mr. T. observes,

"'There have been many conjectures respecting the cause of the fatal termination of these cases, at which I confess I feel surprised; among others, the inflammations by extension of the heart, or the membranes of the brain, and the conveyance of pus into the circulation, have been mentioned. Not to insist on the innocuous quality of pus, it should be observed, that the most rapidly destructive inflammation is that which has the true adhesive progress in which no pus is secreted. But if we consider the importance of the veins in the economy, the extent of surface which the collective areæ of the venous trunks afford, larger, I imagine, than any of the shut sacs of the body and the diffused and disorganizing character of the inflammation, we can surely be at no loss to account for the disturbance of the system. It is an error to suppose that any quicker sympathy exists between the constitution and the venous, than the arterial or absorbent system. I say this, because

* Trans. of a Soc. for the improvement of Med. and Chir. Knowledge, Vol. I. London, 1793, p. 18.

† Essay on the Occasional Ill-consequences of Venesection. Surgical Works, Vol. II. London, 1823, p. 150.

‡ On Diseases of Arteries and Veins. London, 1815, p. 511, et seq.

I have observed something like that superstitious alarm which is excited by events that we do not expect, and cannot explain, has been produced by the fatal catalogue of tied veins, and a comparison of this with the generally successful cases of tied arteries. All the mystery of veins is, as I have attempted to show, that they are indisposed to inflame, but when excited, inflame by continuity, and *therefore* it is that the constitution sympathises so deeply.'"* 6.

Who can read this passage without seeing how words are erected into things, and the expression of certain facts in other language offered as the obvious *explanation* of those facts? The marrow of the whole is this;—that phlebitis is fatal, the extent of inflamed surface is great, the inflammation severe, and the constitution much affected *on account* of veins inflaming "by continuity." The disclosure leaves us much where we were before.

Mr. Carmichael cleaves to the extension of information "to the cava and perhaps to the heart," and the mingling of the blood and pus.† M. Breschet connects typhus and phlebitis within the cranium as effect and cause, but leaves the *how* to the imagination of his readers.‡ M. Bouillaud holds to the presence of pus in the system, and flanks his views by the experiments of Baglivi, Majendie, and Gaspard on the injection of acrid and putrid matters into the veins of animals.§ M. Ribes throws out the opinion that the veins and venous blood are primarily affected in the fièvres adynamiques, but like M. Bouillaud he has left the *quomodo* of the connection between the local and constitutional effects of phlebitis unessayed.‖

Mr. Guthrie who has treated of phlebitis after amputation "assumes" that it is adhesive or healthy, and easily cured; erysipelatous or unhealthy, and almost invariably fatal. He states the facts and leaves the explanation to those who can give one.¶ Sir A. Cooper asserts the occasional extension of inflammation to the large veins and heart, and remarks that if pus remains in a vein without pointing, life is destroyed by excessive constitutional irritation.**

The above are the explanations or theories advanced by authors from Mr. Hunter down to Sir Astley Cooper to account for the fatality of phlebitis. Mr. Arnott is not satisfied with all or any of them, and thinks that the doubt which yet prevails respecting the true rationale of the case is rather attributable to the question not having hitherto received the careful attention requisite to solve it. Mr. Arnott proceeds to the detail of cases in order to fulfil the desideratum he deplores, and our readers will presently see with what success.

FATAL CASES OF INFLAMMATION OF VEINS.

The first three cases were witnessed and are detailed by Mr. Arnott him-

* Cooper and Travers' Surgical Essays, vol. 1, 3d edit. London, 1818, p. 286.
† Trans. of King's and Queen's Coll. of Physicians in Ireland. Vol. 11, Dub. 1818, p. 355, et seq.
‡ Journ. Complement. Tome II. p. 325, et tome III, p. 317. Paris, 1819.
§ Révue Medicale, Juin, 1825, p. 424,5.
‖ Mémoires de la Société Médicale d'Emulation. Tome 8, Paris, 1817, p. 624.
¶ On Gun-shot Wounds, &c. 3d. edit. 1827, p. 299.
** Lectures on Surgery, by Tyrrell. Vol. III. London, 1827, p 205 et seq.

self, the remainder have been collected with much industry from various sources. Ten of the following instances of phlebitis are from venesection, two from the operation for aneurism, three from amputation, and two from excision and division of the saphena.

Case 1. *After venesection.* Sophia Brancher, æt. 25, was bled on the 27th Nov. 1826, from the left median basilic vein for an unimportant accident received on the preceding day. On the 28th she resumed her occupation of weaving, and towards evening the arm felt stiff and painful. On the 29th, she continued at her work, and all the symptoms became aggravated; on the two following days she was unable to use the arm which she poulticed, and on the 2nd of December she entered the hospital. At this time a small crust covered the wound made in venesection, and the inside of the arm above and below the elbow joint was swollen, red, and very painful upon pressure. The face was pale and anxious, the skin hot and dry, the pulse full and 120, the tongue white and moist, great thirst, no appetite, bowels open from medicine. Sixteen ozs. of blood abstracted from the opposite arm induced fainting; it was highly cupped and buffed. She passed a bad night and on the 3d complained of pain in the abdomen, increased by pressure or deep inspiration. This pain was removed by leeches, and on the 5th the arm was easier, but the inflammation was extending towards the axilla. 7th. Arm less inflamed and wound in the vein discharging freely pus sometimes mixed with blood;—face very pale and anxious, pulse small and 104, tongue furred and dry in the middle, pains throughout yesterday and to-day all over the body, especially in the extremities. On the 8th, the respiration was hurried, and the pains very severe in the calves of the legs; on the 9th she was better, but the countenance was more anxious and sallow; on the 10th the improvement was still more marked; on the 11th the left arm had nearly regained its natural size, but she complained much of the pains in her limbs, and towards evening the respiration grew laborious, the skin cold, the bowels were much purged and the abdomen painful upon pressure. 12th. Face pale and altered, matter has formed under the skin of the *right* fore-arm without cutaneous redness and five ounces have been evacuated by puncture, the left knee is swollen and painful from effusion into the joint. She now sank rapidly, and died early on the morning of the 14th.

"The husband chose to be present at the examination after death, to restrict it in point of time and extent: it was therefore hurried and imperfect. The following points were, however, ascertained. Inflammatory condensation of the cellular tissue of the fore-arm, and arm in the inflamed part. A chain of small suppurations *in the course of the blood-vessels*, with white healthy pus from the elbow to the axilla. The axillary and subclavian veins, the superior cava, and the lining of the heart were quite natural. No diseased appearances in the chest; the liver light coloured, and beginning to assume the yellow appearance produced by indulgence and spirits. The other abdominal viscera were sound.

"The knee was not allowed to be examined." 13.

The account of the dissection is indeed imperfect, for no mention is made of the state of the vein which had been inflamed in the first instance. It is worth remarking, that although the respiration was laborious and the abdomen painful upon pressure no diseased appearances were found in either cavity.

Case 2, *after Venesection.* John Carr, æt. 47, was bled Jan. 1st, 1827, for a strain in his back, and returned to the hospital next day with pain in the wound and inflammation of the cellular tissue. The face was pale and anxious, the pulse frequent full and hard, and he had pain in the chest on taking a full inspiration. On the 3d, the pulse being full, hard, and 116, he was bled to 20 ounces, when he fainted; the blood was much buffed and the crassamentum very tough. On the 4th the pulse was full, hard, and upwards of 100, in consequence of which he was bled again to 20 ounces with deliquium, and the blood was again highly cupped and buffed whilst the serum had a milky appearance. He breathed easier in the evening, and next day the thoracic symptoms were nearly gone. 6th. Arm more swollen, pus discharged on pressure from the orifice of the vein, purging, shivering fits in the evening. 7th. Countenance pale and anxious, great irritability, pulse small, and 140, tongue slightly brown and dry. On the 10th, he was in much the same state, save that the respiration was laborious, and the countenance sallow; the inflammation in the course of the vein was diminished, but the discharge from the orifice was greater and mixed with bubbles of air. On the 13th the inflammation was increasing towards the axilla, and on the 18th fluctuation being felt near the insertion of the deltoid, a puncture was made and two ounces of thick, yellow, putrid purulent matter let out. On the 20th he complained of pain in the chest, pulse small and 104, wound in the vein discharging no pus, abscess in the axilla healing up. 25th. After taking cold drink last night was attacked by a severe rigor, and during the night and this morning he has had several more; he is very low, and the cough is accompanied with copious purulent expectoration. Delirium supervened, the irritability was great, the breathing so difficult at times as to threaten suffocation and then accompanied with a peculiar cry. The exhaustion made progress, the suffocative paroxysms became more frequent, and he died at 6, a. m. of the 30th.

Sectio Cadaveris, Six Hours after Death. "An incision was made from the clavicle to the middle of the fore-arm, so as to divide the skin, which was dissected back. A small abscess, with a smooth secreting surface, was found between the basilick and median basilick veins, and opposite the external wound. Both these veins were impervious to blood, and were reduced to a cord-like substance. On tracing the basilick-vein upwards, it was found to terminate in an oblong shaped abscess about two inches above the original wound in the vein: it had a thick and irregular smooth surface, and the surrounding cellular tissue was very dense; the basilick proceeding from the abscess was lined with an irregular false membrane for about two inches, when it terminated in a quantity of fibrin, which filled up the cavity of the vein. Immediately above this, the cephalick and several smaller veins terminated. The internal surface of the heart and of the large veins appeared healthy, and were filled with recently coagulated blood.

"The pericardium contained a few ounces of a yellowish serum mixed with portions of lymph. On the surface of the heart several large white spots appeared. There were extensive adhesions between the pleura costalis and pulmonalis. The lungs were healthy, excepting several points where *vomicæ* had formed; a very large one was situated in the posterior part of the right lobe.—The bronchiæ were filled with mucus mixed with air.

"The abdominal viscera were healthy.

"The arachnoid membrane, covering the hemispheres of the brain, was thickened, opaque, and of a milky appearance. Serous fluid was effused into the texture of the pia mater.—

Several ounces of yellowish serum were found in the lateral ventricles. The substance of the brain was healthy." 18.

We beg the reader to observe, that the abscesses in the lungs are described as *vomicæ*, a very different kind of thing from the genuine traumatic depôt. And yet Mr. Arnott farther on cites this case of Carr among the instances of "hepatization of the lungs, the infiltration of pus into their tissue, or small collections like a mixture of pus and lymph." The appearances too of the arachnoid and pia mater, which will by-and-bye be found ranked in the sequelæ of phlebitis by Mr. Arnott, appear to us to be extremely common, and by no means to deserve the importance into which they are elevated by our author. We shall return to this point hereafter.

Case 3, *after Venesection.* Henry Arnold, æt. 51, admitted Jan. 19th, 1827, with old ulcer of the leg, was twice bled, and three days after the second bleeding the wound of the vein became painful. On the 29th, (sixth day) he had rigors followed by heat and thirst, and on the 31st the inflammation extended from the elbow to the axilla, and he had another rigor, which continued to recur at intervals, until the 4th of February, when he complained of severe pain and some swelling of the left knee-joint. Arm easy, and a little thin pus flowed from the wound in the vein on pressure, countenance yellowish, pulse hard, full, 100. On the 5th, the knee was distended to the utmost with fluid, the thigh swollen, painful, slightly red and very hot, the superficial veins of the knee and thigh excessively distended, the pulse soft and 140. On the 6th, he complained of pain in the right shoulder without swelling or redness, and on the 8th he died.

Sectio Cadaveris ten hours after death. "The cephalick-vein, which had been punctured, was thickened, and contained pus for about two inches below, and four inches above the wound, where a coagulum of blood was found filling the cavity; above and below these points the vessel was healthy.

"The arachnoid membrane was thickened, opaque, and whitish. The cellular texture of the pia mater was loaded with serum, and an increased quantity of fluid was found in the ventricles.

"The cavity of the knee-joint was filled with tolerably thick pus of an uniformly reddish colour, as if from an intimate admixture of blood. The synovial membrane was thickened, with an irregular and almost villous surface; it was extremely vascular in its whole extent. The cartilaginous coverings of the femur and tibia had undergone considerable absorption, so that the convexities of the femoral condyles, and the corresponding excavations of the tibia, were completely bare. The cellular substance covering the capsule of the knee, under the extensor muscles, was inflamed, thickened, and loaded with pus. This texture was in the same state on the surface, and throughout the whole substance of the vasti and cruralis muscles. Sections of these muscles presented a most singular appearance, their large fasciculi being separated, apparently, by layers of thick yellow pus. The matter, although precisely similar in colour and consistence to that produced by phlegmonous inflammation, was nowhere collected into an abscess; but was diffused through the cellular structure, as serum is in the case of anasarca. In the rest of the limb there was an effusion of a bright light yellow serum.

"The cellular structure, exterior to the orbicular ligament of the right shoulder, was filled with thick yellow pus; but the cavity of the joint and the deltoid muscle were natural." 20.

This completes the series of three cases observed by Mr. Arnott himself

at St. Bartholomew's Hospital. The remainder are from various sources, and we shall endeavour to deal with them as briefly and succinctly as the occasion will permit, for the constant reference of the author to particular cases in his general remarks will prevent us from *skipping* any one.

Case 4, *after Venesection.** Gaspar Goldinger was bled in the right arm on the 16th November for epilepsy, and on the following day the puncture was inflamed. 18th. Arm very painful and swollen from below the elbow to the shoulder, face and body yellowish, pulse quick and feeble. The fever and prostration increased, and on the 22d the respiration was short and accompanied with pain in the right side of the chest. He died in the night of the 23d, seven days after the bleeding.

Sectio Cadaveris. Cephalic filled with pus from its termination in the axillary to its origin at the bend of the elbow from the median cephalic and superficial radial, the latter of which also contained pus for two inches. Coats of the vein thickened, indurated and red. Cellular tissue of right pectoral muscle infiltrated with thick greenish pus. Eight or ten ounces of yellowish opaque serum in the right sac of the pleura, adhesions of the pleuræ on the left by a delicate false membrane, small hepatized portions gorged with fluid, puriform in some in both lungs. Arachnoid membrane opaque and indurated, with fluid over and in the pia mater; some yellowish serum in the ventricles.

Case 5, *after Venesection.*† A robust soldier was bled for ophthalmia and next day the arm inflamed. Fever followed, and although the wound in the vein had healed his pulse on the 17th day was 120 and feeble, skin hot, tongue covered with brown fur, respiration difficult, prostration great. On the 23d day a painful swelling was observed above the clavicle, and in a few days a soft diffused swelling underneath the angle of the lower jaw. In the course of the 7th week he died.

Sectio Cadaveris. Coats of the cephalic vein thickened and its cavity obliterated from an inch above the puncture to the shoulder—*brachial, axillary, subclavian and internal jugular veins enlarged, thickened, and indurated*—external jugular and subclavian filled with pus, thickened, and lined with lymph—diseased appearances terminating abruptly. A serous fluid with flakes of lymph was contained in the thorax, and the lungs presented some small abscesses. Veins of the pia mater turgid—more serum than usual in the ventricles.

Case 6, *after Venesection.*‡ Hugh Johnson,. æt. 33, bled on the 15th May, 1810, for ophthalmia. On the 16th the wound inflamed, afterwards discharged pus, and was followed by fever. The wound healed entirely by the 28th, but the fever assumed the decided typhoid type, and the patient died on the 17th day after the operation.

Sectio Cadaveris. Wound in the median basilic closed—pus occupying the mediana longa for about two inches below the origin of the median basilic and cephalic—pus along the whole of the humeral vein to the axilla,

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* M. Le Herinê, Journ. de Medicine, T. 12, p. 417. Paris, 1806.
† Hodgson, p. 512. ‡ Cooper and Travers' Essays, Vol. 1. p. 229.

with an irregular deposit of lymph adhering to its lining membrane—vein abruptly assumed a healthy appearance about an inch before passing under the clavicle—heart healthy, save a small patch of lymph on its anterior surface, and another on the opposite surface of the pericardium—a little fluid in the pericardium and in both sides of the chest.

Case 7, *after Venesection.** Michael Dogherty, æt. 31, bled in the right median cephalic on the 15th April, 1821, for continued fever. Inflammation of the vein took place, accompanied with low fever, and on the 5th day pus mixed with blood could be pressed from the wound. On the 10th day had a severe rigor followed by delirium, and pain across the chest. On the 27th day the wrist of the opposite arm was much swollen and presented a distinct fluctuation, whilst exquisite pain was felt in the left knee. On the 30th day he died.

Sectio Cadaveris. Coats of the mediana longa greatly thickened, and its inner surface lined with lymph, which cabin'd in a small abscess that had formed about the middle of the fore-arm.

"Two inches above the bend of the arm, the cephalick and basilick veins were filled with pus, and their coats were uncommonly thin, and easily ruptured. This appearance extended to the axillary vein, and terminated abruptly before the vein crossed the first rib. The vein remained quite pervious, though its cavity was much diminished; neither did it contain a particle of blood, nor could its valves be observed.

"Between the first and second ribs, near to their sternal extremities, an opening was discovered leading to a sack, formed by an adventitious membrane of coagulable lymph, filled with purulent matter, and pushing towards the pleura costalis. The sack contained four or five ounces of pure pus. At the left wrist there was a similar collection of matter, containing about six ounces of pus. The lungs were perfectly healthy in their structure, but several old adhesions existed between the pleuras in both sides. The heart was natural and healthy, but on the left side there was a deposition of coagulable lymph on its external surface, and the inner coat of the aorta to its arch had a deep red appearance. The other cavities were examined, but nothing of any importance was found." 26.

Case, 8 *after Venesection.*† Clementine, æt. 20, 6 months gone with child, bled on the 12th January, 1829. Inflammation of the veins took place, succeeded by fever, and on the 18th a small quantity of pus was evacuated by enlarging the wound. The local symptoms abated, but the prostration &c. increased, and in this state labour came on, when she died two hours after delivery, on the 14th day from the venesection.

Sectio Cadaveris. Coats of median basilic thickened, and cavity almost obliterated—veins opening into basilic trunk filled with white healthy-looking pus—coats of brachial vein greatly thickened and lined with concrete membrane, cavity also filled with thin reddish pus, till near the clavicle—inflammatory changes rapidly diminishing from axillary vein onwards, *so that opposite the scaleni the subclavian was not affected*—superior cava and heart healthy —marks of recent pleurisy and pulmonary *engouement*, but not pneumonia.

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* Trans. of Med. and Chir. Soc. of Edinb. Vol. I. p. 485-6.

† Archives Générales, Août, 1827, p. 503.

Case 9, *after Venesection.** Capt. L. æt. 34, bled from the arm on the 3d day after lithotomy. Inflammation attacked the vein, and he died at the end of the third week, having suffered for the last 48 hours from symptoms of pleurisy on the same side as that upon which he had been bled.

Sectio Cadaveris. Basilic vein up to its termination and veins corresponding to it down to the back of the hand thickened by inflammation—coats of vessels red, roughened by lymph on their interior, and containing pus—axillary vein and its continuation onward healthy—whole subcutaneous tissue of the arm inflamed, and partially infiltrated with serum. Pleura much inflamed, and about a pint of whey-like fluid mixed with pus and flakes of lymph in its cavity.

Case 10, *after Venesection.*† Thomas Fuller, æt. 21, a prize-fighter, bled twice from same aperture in the right median cephalic for anasarca and dry cough, on the 18th June, 1827. On the 21st, the wound inflamed; on the 22d there were rigors and billious vomiting; on the 23d a sero-purulent discharge continually oozed from the wound. The wound was enlarged, and serum, pus, and blood discharged; hæmorrhage took place in the evening, and another in the night, which was stopped by pressure. The body became yellow, he had no dyspnœa nor cough, and he died in the evening of the 6th day from the venesection.

Sectio Cadaveris. A pint of discoloured serum in the right side of chest and old pleural adhesions—same appearances, but slighter in the left—lower lobes of both lungs, particularly the right, fleshy and consolidated—bronchial mucous membrane injected—more water than usual in the pericardium—general disposition to fluidity of the blood and *staining* of the heart and aorta—liver and kidneys enlarged. Median cephalic greatly thickened, as was the cephalic up to the insertion of the deltoid—interior of vein inflamed *up to within two inches and a half of its junction with the axillary*, beyond which it was sound—no pus in the vein—cephalic trunk inflamed on its inner surface below its junction with the median cephalic, and its cavity in one part plugged up with lymph—no obstruction above the puncture—median basilic thickened and inflamed—basilic also slightly affected.

This concludes the cases of phlebitis from venesection, and we now pass on to those which followed the operation for aneurism.

Case 11, *after the Operation for Aneurism.*‡ John White, æt. 28, operated on for popliteal aneurism Nov. 29th, 1826, when the femoral vein was slightly wounded and tied by nipping up its coats. On the 9th December, the ligature came away from the vein and a little hæmorrhage succeeded on the 10th, with tenderness in the course of the vessels to the groin. On the 14th there was head-ache; on the 20th a severe rigor; on the 21st a slight one, and on the 25th and 26th there was hæmorrhage from the wound. From the 27th the rigors were frequent and severe, and on the 31st he died, thirty-two days after the operation.

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* Med. and Chir. Trans. Vol. XIV. p. 284.
† Lond. Med. Gaz. Vol. II. p. 155.
‡ Cooper and Travers' Essays, Vol. I. p. 243.

Sectio Cadaveris. Communicating with the external wound was an opening in the vein, the coats were thickened and lined internally with adhesive matter. The adhesive inflammation *extended as high as the bifurcation of the cava*, which was also inflamed but contained neither lymph or pus. Considerable serous effusion into the chest—one lobe of the left lung covered with recent lymph, and parenchyma of the lungs apparently inflamed—slight inflammation on surface of intestines.

Case 12, *after Operation for Aneurism.** James Boyle, æt. 40, operated on for popliteal aneurism, May 20th, 1818, when a gush of venous blood followed the passage of the aneurism needle, but the hæmorrhage ceased spontaneously. On the 5th day a little pus flowed from the wound and there was general *malaise*, increased on the 6th. On the 13th day several distinct rigors with much depression; another rigor on the 14th; three on the 15th with delirium and prostration. Blood was twice abstracted and found to be buffed, but the patient got worse, had another rigor on the 17th day and died on the 19th day from the commencement of the phlebitis and 24th from the operation.

Sectio Cadaveris. Crural vein had been wounded but not tied—its inner surface lined with pus and organized lymph as low as the ham, where the vein became suddenly impervious from deposited lymph—disease extended a considerable way down the saphena, and *upwards as far as the common iliac*, beyond which the examination was not allowed to be prosecuted.

The next three cases exemplify phlebitis after amputation.

Case 13, *after Amputation.*† John Crute, æt. 30, had the thigh amputated for scrofulous disease of the knee-joint—was very low for the next two days—suffered on the the third‡ from unusual constitutional irritation, and was attacked that night by bilious vomiting—had slight rigors in the evening of the fourth day—prostration and delirium succeeded—and the patient died on the sixth day from the amputation.

Sectio Cadaveris. Ligature on the mouth of the femoral vein, *from which along the iliacs and cava to the entrance of the emulgents* the interior was coated by large flakes of lymph—marks of diffused inflammation extending to right auricle.

Case 14, *after Amputation.*§ Eliz. Mitchell had the thigh amputated on the 13th of Feb. 1818, for compound dislocation of the ankle-joint which had happened on the 27th of January. In the night of the 17th she vomited, complained of much depression, and next day a previous yellow suffusion was much increased. On the 20th she had a long and violent rigor, many of which continued to recur and she died on the 14th day after the operation.

Sectio Cadaveris. Surface of stump gangrenous—femoral vein full of pus as high as Poupart's ligament, coated with soft lymph above this to the ava which was not inflamed—liver sound—examination carried no farther.

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* Trans. of Coll. of Phys. in Ireland, vol. II. p. 350.
† Cooper and Travers' Essays, vol. I. p. 247.
‡ Mr. Arnott says "eleventh"—an evident mistake.
§ Trans. of Coll. of Phys. Ireland, vol. II. p. 365.

Case 15, *after Amputation.** Jane Strangemore had the thigh amputated Sept. 27th, 1823, for disease of the knee-joint—vomited bilious matter next evening—wound had nearly healed on the 8th of Oct.—complained of pain in the other calf and heel on the 9th, which parts swelled and were tender on the 10th, when she again vomited bile, and continued to do so at intervals—was slightly jaundiced on the 25th—died on the 27th, thirty days after the amputation.

Sectio Cadaveris. Stump sloughy as high as Poupart's ligament—adhesive inflammation within the vein to this point, above which it contained pus, lymph, and blood along the cava to beyond the diaphragm—traces of inflammation distinctly observed almost into the auricle—inflammation along the left iliac vein into the pelvis and along the femoral as far as the foot—the vein at the left groin distended with pus—viscera healthy.

The two succeeding and concluding cases of venous inflammation were after operations on the saphena.

Case 16, *after Excision of Part of a Varicose Vein.*† John Dodging, æt. 35, had a portion of a varicose branch of the posterior saphena excised from the right leg on the 25th June, 1828. Next day inflammation appeared along the thigh, and he had vomiting of greenish matter. On the 28th, dyspnœa, great sickness, and pain in epigastrio—on the 30th, phlegmonous erysipelas of the left arm—on the 2d July pain in the head, brown tongue, and depression—on the 3d, the patient deeply jaundiced, and evidently sinking, cornea of both eyes opaque, and conjunctiva injected—on the 4th he died.

Sectio Cadaveris. Posterior saphena contained lymph and pus as high as the ham where the inflammation terminated abruptly—several small muscular branches contained fluid pus. Deep-seated abscesses beneath the fascia and amongst the muscles of the left fore-arm and leg—sero purulent effusion between the muscles of the right fore-arm. A small abscess, evidently from recent inflammation in the superior lobe of the right lung. Considerable effusion into the cellular tissue of the pia mater, particularly towards the basis cranii—lymph around the trunks of the carotids—nerve of the third pair on the left side flattened and softer than the right—nerve of the fifth pair on the right side similarly changed, but to a greater extent—crystalline humor of the right eye so soft as to yield to the slightest touch—vitreous humor of a reddish-yellow color, and its membrane traversed by red vessels—retina of deep red color.

Case 17, *after Division of the Saphena.*‡ A middle aged man had the saphena major divided where it passes over the internal condyle, on account of varix and ulcer. At 5, a.m. of the 2d day had a shivering and was light headed; sickness at noon. On the morning of the 3d day was sick and much depressed; some redness of the thigh but little pain or tenderness—in the evening the redness, &c. had extended upwards in the course of the saphena major—he died at 3 a.m. of the 4th day.

Sectio Cadaveris. Small quantity of matter in external wound—extremi-

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* Med. and Phys. Journal, vol. LVI. p. 35.
† Lond. Med. Gaz. vol. II. p. 284. ‡ Hodgson, London, 1815, p. 555.

ties of saphena divided in the operation united by the coagulable lymph—saphena from the wound to its junction with the femoral reddened and vascular, but containing neither lymph nor pus—vena cava and abdominal viscera healthy.

In order to render the account of these cases complete and to preserve the *continuity* of the subject, we shall introduce in this place, a case of phlebitis communicated by Mr. Lawrence and placed in the Appendix of our author's paper.

Case 18, *after Venesection.* A. B. æt. 34, received in Bethlem Hospital, Nov. 12, 1828, for mental derangement which had existed fourteen days. He had been bled in the median cephalic and basilic veins, and the right arm from the middle of the fore-arm to the axilla was red, swollen, and painful, with induration in the course of the cephalic and basilic. There was low fever which became complicated with dyspnœa, cough, mucous expectoration, and pain in the epigastric region. He died in the night of the 25th, the redness, swelling, &c. of the limb having quite disappeared for some days before death.

Sectio Cadaveris.—Subcutaneous tissue at the bend of the elbow and neighbouring part of the arm and fore-arm infiltrated with serum and lymph —median cephalic converted into an impervius cord, as was the cephalic half way up the arm *where it suddenly became healthy*—a little pus about the puncture in the integuments—median basilic and other small branches impervious—basilic thickened, indurated, but containing nothing—axillary and subclavian less thickened but their interior furred with brownish lymph, as far as the termination of the latter which was blocked with a soft mass of lymph —cellular tissue round the axillary and subclavian veins indurated and axillary glands enlarged. Six or seven ounces of opaque yellowish-brown fluid in the pericardium, which was injected, inflamed, and presented portions of ecchymosis—bright yellow patch as large as a sixpence on the surface of the left ventricle—muscular substance of this ventricle softened and partially broken down, with yellow pus diffused amongst the broken texture. Small portion of right lung impervious from recent inflammation—two contiguous lobes partially agglutinated by pleural adhesions. Mucous lining of trachea and bronchial tubes inflamed—liver partially tuberculated on its surface—gall-bladder strongly adherent to neighbouring viscera.

Mr. Lawrence seems to think it strange that the left side of the heart was affected rather than the right. Had the *internal* lining membrane been affected there would be some grounds for surprise, as this membrane is continuous on the right side of the heart with the venous tunics. The suppuration, however, being in the *muscle*, and connected with obvious inflammation of the pericardium, we see no more matter for astonishment than a similar deposition in a particular part of any other muscle would create.

Case 19, *after Venesection in the Horse.* A horse was bled in the jugular vein on the 6th of October by a farrier, suppuration took place in the wound and on the 19th day from the operation the animal died. The vein contained pus above the puncture, and was thickened; it was obliterated for three inches below. Heart natural—depositions in the lungs of a substance like dirty tallow or adipocire—some pleurisy—blood in the stomach.

"From these seventeen cases of fatal Phlebitis, the first conclusion deducible is, the total disproval of the assertion, that death results from the extension of the inflammation of the vein to the heart. In none of the ten instances following venesection was the superior cava affected, much less the heart; and in half this number, inflammation had not reached to the subclavian, or even to the axillary vein. In the cases where the inferior cava had become inflamed, viz. those of Crute, White, and Strangemore, the first is the only one in which the heart is represented to have been actually implicated; and here, the deposition of lymph terminating at the entrance of the emulgent vein, the observation is, that 'there were marks of diffused inflammation extending to the right auricle of the heart, but the signs of adhesive inflammation terminated as described.'

"As a cause of death, then, the extension of the inflammation to the heart may be considered as a mere matter of assumption, the history of the error being simply this: Mr. Hunter's observations not having enabled him to form a decided opinion as to the cause of death, when this affection occurred in the jugular vein of horses, he suggested as a query, whether it might not depend on the inflammation extending to the heart. By succeeding writers this suggestion was adopted, without examination, and without any evidence being offered in its support. Indeed the circumstance itself is of very unusual occurrence; for, with the exception of the instance just alluded to, I have only found two others in which it is alleged, that the inflammation had extended from the vein to the heart, and in these the description is not very precise. Both cases are mentioned by M. Ribes, in the Revue Médicale for July 1825. In one, occurring so far back as the year 1799, where the veins of the arm were inflamed, in connexion with gangrene of the hand from chilblain, 'traces of inflammation' are stated to have been continued into the superior cava, and even to the interior of the right auricle and ventricle; and, in the other instance, where the saphena evinced some signs of inflammation, in a case of mortification of the leg and foot, it is stated in the same vague terms, that 'the right auricle and ventricle of the heart, as well as the inferior cava, at its insertion into this organ, had manifest traces of recent inflammation.'

"It is to be regretted that M. Ribes has not distinctly specified what the traces' were, which he considered as indicative of inflammation in the lining membrane of the heart; an omission which when contrasted with his immediately preceding minute description of the changes produced by inflammation in the coats of the veins, leaves us in considerable doubt as to the comparative value of these traces as proofs of inflammation. Of course, it is not by these remarks meant to be denied, that inflammation may extend to the lining membrane of the heart from the veins; but considering the fact itself as not yet sufficiently established, it is perhaps not requiring too much that the evidence adduced in its support should be of an unequivocal character.

"As the preceding remarks have indicated, there are considerable differences in the extent of vein occupied by inflammation in fatal cases of Phlebitis. Sometimes the disease has spread into several, or most of the veins of a limb from that primarily affected; at others, it has not proceeded beyond the vessel in which it originally appeared. This last circumstance, with that of the fatal consequences sometimes ensuing from inflammation, limited to a few inches only of a vein, (as of about six of the cephalic, in the case of Arnold,) justifies the inference that the dangerous consequences from Phlebitis bear no direct relation to the extent of the vein which is inflamed." 44.

We agree with Mr. Arnott on the great infrequency of the extension of inflammation to the heart, an infrequency which is fully and fairly established by the cases here brought forward. Like Mr. Arnott, too, we are inclined to view with scepticism descriptions like those of M. Ribes, where the reader is vaguely told that "traces of inflammation" existed in the vena cava or other great vessels. Nothing is more common in phlebitis than a preterna-

tural fluidity of the blood after death, and a consequent *staining* of the lining membrane of the heart and large vessels, an appearance which might readily deceive those who are not aware of the circumstance. The finest specimen of this condition of blood-vessels in the Museum of Great Windmill Street was obtained from the body of a man who died of phlebitis in St. George's Hospital. Unless the appearances of inflammation are distinctly specified, no reliance whatever should be placed upon the statement.

"In endeavouring to ascertain the nature of the connexion between the primary and secondary affections of this disease, the question which next suggests itself is, whether the latter depends, as has been alleged, upon the entrance of pus into the circulation. We are thus led to inquire into the contents of the inflamed vessels, and on referring with this view to the cases which have been adduced, it will be found that in a number of them, where an open wound existed in the vein, pus was discharged from it during life. Whilst in fourteen cases out of seventeen, (those of Brancher, Carr, Arnold, Goldinger, that by Mr. Broughton, Johnson, Dogherty, Clementine, Captain L. Fuller, Boyle, Mitchell, Strangemore, and Dodging,) pus, or pus in conjunction with lymph, was present in the vessel after death. In two instances, no mention is made of pus, the contents of the veins being described in the one (White) as 'adhesive matter,' in the other (Crute) where the cava was concerned, as 'flakes of lymph.' In one case only, (Mr. Hodgson's) where the inflammation occurred in a vein previously diseased, or in a vein the branches of which at least were varicose, neither pus nor lymph was found in the vessel.

"It results from this statement, that although pus is present in the veins in the great majority of fatal cases of Phlebitis, and that although it should appear from the character of the general symptoms, and the effects produced upon animals, by the injection of a similar fluid into their vessels, that the passage of pus into the circulation is probably the principal, yet the circumstances do not justify us in regarding it as the sole cause of the secondary affection. In addition to the presumed absence of pus in two instances, and to its declared absence in a third, it may be remarked, that the early appearance of the symptoms in some cases seems scarcely to correspond with the time usually required for the production of pus, as in one which occurred to Mr. Freer, where they came on, suddenly, four hours after ligature of the saphena. If, then, the constitutional affection in Phlebitis is to be explained by the introduction of a fluid into the circulation, which contaminates the blood, and operates as a poison, this property must be attributed to inflammatory secretions generally from the vein, although not purulent; and it remains to be seen whether the symptoms of this affection are such as can be accounted for by the passage of pus only into the system." 46.

This question of the contamination of the system in phlebitis by pus or any other morbid secretion from the venous tunic is deeply involved in obscurity and difficulty. The typhoid character of the symptoms, the yellow or sallow skin, the disposition to local inflammations and deposites as well as to preternatural fluidity of the blood after death would appear to point out a contamination of the fluids. But on the other hand, such cases as that of Mr. Freer must stagger the votaries of the *humoral* doctrine. It is certain too that the free passage of pus from the inflamed vein into the general current of the circulation is by no means essential to produce the secondary effects of phlebitis and a fatal issue. For instance, after venesection pus may be secreted into the cavity of the vein, but hermetically sealed there by effusion of lymph agglutinating the sides of the vessel above and below.—

We remember witnessing a case of this kind at St. George's Hospital, where matter in the cephalic vein was bounded by an impassable barrier of lymph towards the upper extremity of the vessel, and yet the patient died from seropurulent effusion into the cavity of the pleura. This fact also proves that Mr. Hunter's proposal to arrest the march of phlebitis by producing the "adhesive inflammation" between the wound and the heart, is an idle notion engendered by a subtle theorizing spirit. In fact, the cases of White and Crute (10 and 13) are *fatal* specimens of the "adhesive inflammation." We believe it must be conceded that we do not at all understand the modus operandi of phlebitis on the system, and that though the constitution of the fluids would seem in many instances to be deeply deteriorated, it would be unsafe and unphilosophical to argue on such deterioration in others. We must pass to another point.

"Before quitting the subject of the local affection, I would allude briefly to a circumstance which has escaped the notice of those who have previously treated of inflammation of veins, viz. the point at which the inflammatory changes in the coats usually terminate. According to my observation, these changes are limited by the passage of a current of blood; where a trunk is concerned, the boundary being the entrance of a branch, and where a branch is concerned, the boundary being the junction of this with the trunk." 47.

Our author's attention was first drawn to this point on examining the jugular vein of a horse which had inflamed after venesection, as well as by two other cases which he briefly mentions. In all, the inflammatory appearances ceased abruptly at the point of junction with the main trunk or the entrance of a considerable branch.

"I believe that in the case of Brancher, the inflammation in the basilick vein was bounded by the entrance of the subscapulary, the axillary vein not being affected. It will be found in the report of Carr's case, that immediately above the termination of the diseased appearances, the cephalick and several smaller vessels entered. In the instance of Goldinger, the inflammation extended in the cephalick, to where it terminates in the axillary. In the case of Mitchell, the morbid appearances extended in the common iliac, to where it joins the cava, which was not inflamed. In the case of Mr. A. related by Dr. Duncan, they spread in the cephalick, to its termination in the subclavian, which remained quite healthy.

"Of three cases of inflammation of the cava after parturition, seen by Mr. Wilson, in two the diseased changes ceased at the entrance of the venæ cavæ hepaticæ, and in the other, at the entrance of the emulgent veins. In the instance of Crute, it is distinctly stated that the deposition of lymph in the cava terminated at the entrance of the emulgent. And it would be easy to show, by referring to the details of several of the other cases, that the point at which the inflammation in the vessel is stated to have ceased abruptly, corresponds precisely with that at which certain veins enter." 51.

We confess that we think Mr. Arnott has attached an unnecessary importance to the foregoing point. It is obvious that unless the inflammation of the vein extend as Hunter erroneously supposed, to the heart, it must cease more or less abruptly at some point between the injured part and the cardiac extremity of the venous system. Now when we take into consideration the constant junction of branches with the greater trunks from the very extremity of the system to the cavæ, and even with them till they *débouchent* in the right auricle, we shall cease to wonder at the occasional cessation of inflammation at one of these points of junction. We say *occasional*, for Mr. Arnott's own

cases are sufficient to prove in the teeth of his conclusions that it is nothing more. In Case 5 the brachial, axillary, subclavian, external and internal jugulars were all affected;—in the case of Clementine, the 8th on the list, the inflammatory appearances extended from the median basilic *up into the subclavian opposite the scaleni*;—in the case of Thomas Fuller, the 10th, the median cephalic had been wounded and the inflammation passed up into the cephalic where it was lost *two inches and a half below the axillary*, consequently where no branch could have entered it;—in Thomas White, case 11, the "adhesive inflammation" extended *from the femoral vein to the cava, which was also inflamed though without lymph or pus*;—in James Boyle, case 12, the crural vein having been wounded was lined with pus and lymph *from the ham to the common iliac, and the disease extended for a considerable distance down the saphena*;—in John Crute, case 13, lymph was deposited *from the femoral vein to the emulgents*;—in case 15, Jane Strangemore's, purulent matter, lymph, and blood were observed *from the femoral vein to the cava beyond the diaphragm*.

Really we cannot conceive how Mr. Arnott could overlook these stumbling blocks to his position, which contradicted him, we may almost say, to his face. Even in the cases which he cites more particularly himself, circumstances will be found which shake his statement to its very base, circumstances which he does not and cannot explain. In Mitchell, for instance, the 14th, the vein was inflamed from the face of the stump as high as the junction of the common iliacs to form the vena cava. Now why should the inflammation pass the entrance of the internal into the external iliac, if there were any real virtue in these venous coalitions? Phlebitis would seem to be a very capricious sort of inflammation, since it leaps in derision over one branch to stop at the rubicon-like influence of another! Even had not Mr. Arnott supplied us with the means of confuting himself in the cases to which we have referred, we should look with suspicion on such a pathological law as this, because it seems opposed to reason and analogy. We can readily understand how a deposition of lymph may bound an inflammation, and prove a *cordon sanitaire* in arresting disorganization. But how the entrance of one vein into another, and the presence of a fresh current of blood favouring by its direction the propagation of inflammation along a continuous tunic, can prove a *barrier* to that inflammation, we do profess ourselves unable to conceive. Fortunately *facts* step in to cut the knot, and save our wits from its bewildering difficulties. Facts, we say, are opposed to Mr. Arnott's supposition and the observations of future observers will only be offerings to its shades, its *dis manibus!* It was but a week or two ago that we witnessed a case at St. George's Hospital, in which phlebitis of the femoral vein succeeded amputation of the thigh. On dissection pus and lymph were found to be contained in the femoral and external iliac, but the inflammatory appearances were *not* arrested abruptly at the junction of the internal iliac or the cava. This fact was particularly noticed by several gentlemen in the hospital deadhouse, in reference to the unsoundness of Mr. Arnott's views on the subject. In justice to Mr. A. we shall quote his concluding passage:—

"I have stated the foregoing facts regarding the limits of the diseased changes in Phle-

bitis, without pretending to explain how it happens that this same inflammation which has stopt short at the entrance or passage of a current of blood, may not only already have passed several currents, but have extended itself into the vessels conveying them." 51.

How significant a commentary this short but pithy acknowledgment of difficulty offers on our text;—

"A thousand years scarce serve to form a state;
"An hour may lay it in the dust!"

SECONDARY AFFECTION IN PHLEBITIS.

"The secondary affection in Phlebitis, usually shows itself in from two to ten or twelve days after the receipt of the injury which has occasioned the inflammation in the vein; when the vessel has been previously diseased, sometimes sooner. The symptoms may be thus briefly characterised.—

"Great restlessness and anxiety, prostration of strength and depression of spirits, sense of weight at the precordia, frequent sighing or rather moaning, with paroxysms of oppressed and hurried breathing, the patient at the same time being unable to refer his sufferings to any specific source. The common symptoms of fever are present, the pulse is rapid, reaching sometimes to 130 or 140 in a minute, but is in other respects extremely variable. There is often sickness and violent vomiting, especially of bilious matter. Frequent and severe rigors almost invariably occur, sometimes to the number of three or four in the course of a few hours. The general irritability and deep anxiety of countenance increase, the manner is quick, and the look occasionally wild and distracted—When left to himself, the patient is apt to mutter incoherently, but on being directly addressed, is found clear and collected. The features are pinched, and the skin of the whole body becomes of a sallow, or even yellow colour.

"Under symptoms of increasing debility, and at a time when the local affection may appear to be in a great degree subsiding, secondary inflammations of violent character, and quickly terminating in effusion of pus or lymph, very frequently take place in situations remote from the original injury; the cellular substance, the joints, and the eye have been affected, but it is more particularly under a rapidly developed attack of inflammation of the viscera of the chest, that the fatal issue usually occurs. Whether this is observed or not, death is always preceded by symptoms of extreme exhaustion, such as those of a rapid feeble pulse, dry, brown or black tongue, teeth and lips covered with sordes, haggard countenance, low delirium, &c." 53.

The duration of this affection varies considerably and that under circumstances that do not readily admit of explanation. In Mr. Hodgson's case, the 17th, the patient died four days after the division of the saphena, whilst in case 5, after venesection the patient survived till the end of the seventh week. The morbid appearances found in the bodies of those who have died of phlebitis are very remarkable, and are thus arranged with respect to their various situations by our author.

"In the Chest—effusions of sero-purulent fluid into the cavities of the pleuræ and pericardium, exudation of coagulable lymph on the surfaces of the heart and lungs, hepatization of the latter organ, the infiltration of pus into its tissue,* or small collections like a

* "Pus was deposited in the muscular substance of the heart in a case of Phlebitis after venesection, which occurred subsequently to this paper being read to the Society, and an account of which, presented to me by Mr. Lawrence, will be found in the Appendix."

mixture of pus and lymph.* Such appearances presented themselves in ten cases (Carr, Goldinger, Mr. Broughton's case, Johnson, Dogherty, Clementine, Capt. L., Fuller, White, and Dodging,) out of seventeen; in three, (Boyle, Mitchell, and Mr. Hodgson's case,) the thorax was not examined; in two, (Crute and Strangemore,) the condition of its contents is not noted; and in two, (Brancher and Arnold,) no diseased appearances were observed

"In the Cellular Substance, intermuscular as well as subcutaneous—pus and sero-purulent fluid has been extensively deposited, sometimes in collections like abscesses, at others, appearing more like an effusion into its cells, than as resulting from the common process of inflammation. These collections most frequently occur in the vicinity of the joints. In two cases Brancher and Dogherty) pus was deposited under the skin of the opposite fore-arm, near the wrist; in one, (Arnold,) with inflammation of the knee-joint, into the intermuscular cellular substance of the corresponding thigh, and into that external to the joint of the opposite shoulder; in one, (Dodging,) into the intermuscular cellular substance of the opposite leg and of both fore-arms; in one, (Goldinger,) into the inter-fibrillar cellular tissue of the corresponding pectoral muscle, and in another, (Dogherty,) between the sternal extremities of the two first ribs and pleura.

"A Disease of the Joints,—consisting of a most violent inflammation of the synovial membrane, its distension with purulent matter, destruction of the cartilage, and baring of the bones (Arnold's case). These changes too, taking place in the brief space of a few days, the knee having been first attacked with pain four days before death, which again took place in sixteen from the date of the injury of the vein which caused its inflammation. In two other cases, (Brancher and Dogherty,) there was affection of the knee-joint, but the parts were not examined after death.†

"In the Eye—opacity of the cornea, injection of its blood-vessels, and destructive changes in its humours or coats, occurred in Dodging.

"Besides these affections, there were found in five instances, (Carr, Arnold, Goldinger, Mr. Broughton's case, and Dodging,) within the cranium, opacity and thickening of the tunica arachnoides, effusion between it and the pia mater, and increased secretion into the ventricles. In nine, (Brancher, Johnson, Capt. L., Fuller, White, Crute, Boyle, Mitchell, and Mr. Hodgson's case,) the head was not examined in three, (Dogherty, Clementine, and Strangemore,) no morbid appearances were noticed." 57.

We have few remarks to make on the foregoing summary, but we cannot refrain from commenting on the state of the lungs and liver in the cases detailed by Mr. Arnott. In *none* of these nineteen cases, including that of the horse, was any thing like a depôt discovered in the liver, and in only *five* was there aught approaching to an abscess or depôt in the lungs. Of these five two are extremely unsatisfactory, it being mentioned in one that there were *vomicæ* in the lungs, extremely different in every respect from the depôts, and in the other that there were "hepatized portions of lung

* "In the Appendix will likewise be found the history of a case of inflammation of the jugular vein in the horse by Dr. John Sims, where depositions of a similar nature had taken place into the lungs."

† "An instance of an affection of the knee and shoulder joints consequent to Phlebitis after venesection, equally destructive in its effects as in Arnold's case, has since occurred in St. George's Hospital, where, through the kindness of Mr. Keate, I had an opportunity of seeing the patient during life, and being present at the examination of the body after death. The case has been reported, Med. Gazette, Vol. II. p. 730."

gorged with fluid which was purulent in some." When Mr. Arnott tells us by and bye that the purulent depôts in the liver and the lungs depend upon *phlebitis*, it will be well to remember that out of nineteen picked cases of that kind, *none shewed any affection of the liver and only three a satisfactory implication of the lungs.** With respect to the opacity of the arachnoid membrane and the serous effusion between it and the pia mater we must also beg leave to observe that little dependence should be placed upon them as a test or consequence of this or that disease. Nothing is more frequent on opening dead bodies than such an appearance, and that in cases of diametrically opposite descriptions, where the patient has been delirious before death, and where he has not. Our readers will find some observations on this subject and cases in point in the 21st number of this Journal, p. 187, et seq. Since that time many additional instances of the kind have occurred under circumstances so various, that as we said before, we attach slight importance to the appearance in question.

Having remarked that although one or other secondary consequence of phlebitis is very common the disease occasionally proves fatal without them, a remark with which we perfectly concur, Mr. Arnott proceeds to compare the progress of the secondary affection to that of diseases arising from the inoculation of a morbid poison. Mr. Arnott particularly alludes to the sequelæ of dissection wounds, and points out in individual cases the disposition to purulent formations in distant parts of the cellular membrane, similar to what has been shewn to take place after inflammation of the veins. An allusion to this coincidence is all we can afford, and we accordingly pass on to—

PART. II.

After adverting to the opinions of Mr. Cheston, Mr. Hunter, Morgagni, Monteggia, Mr. Guthrie, Mr. Bell, M. Velpeau, and Mr. Rose, on the purulent depositions in the internal viscera and cellular membrane that too often follow operations and wounds, Mr. Arnott puts forward his own theory in the following terms.

"In the statement which has been now made, I have not alluded to the theory which attributes the formation of these abscesses to a disturbance of the nervous system, the opinion itself being so purely conjectural, and the operaion of the cause so undefined and unintelligible as to render this unnecessary. In fact, the only view of the subject supported either by evidence, or argument, is that which considers the origin of abscesses and inflammations in remote situations after injuries, as connected with the absorption into the circulation of purulent matter from a wound. That they do depend on the entrance of such fluid into the

* We had ourselves taken notice of the tendency to sero-purulent effusion in the pleura as a consequence of phlebitis, long ere the present paper of Mr. Arnott. Most of our remarks on the subject are scattered in critical articles throughout the Journal, but if the reader will be kind enough to refer to the 18th No. for July, 1828, p. 474, he will perceive that we have noticed the fact very explicitly. At that time indeed we believed that the purulent depôts in the *substance* of the lungs were a common consequence of phlebitis. Subsequent experience, and the observation of many cases, have convinced us that we were in error in that respect. The observations attributed at p. 477 of the same No. to another, were in point of fact our own.—*Rev.*

blood, the consequences which have been observed to follow Phlebitis simply, sufficiently testify, and it becomes a question, whether the occurrence of Phlebitis, and the passage of pus from an inflamed vein into the circulation, is not of itself sufficient to account for the secondary affections of wounds, without its being necessary to resort to an absorption of the same fluid from their suppurating surfaces.

"The secondary affections succeeding to wounds, are, effusions of pus and sero-purulent fluid into the cavity of the chest, and inflammation of the pleura; similar affections of the cellular substance; effusion of pus into, and inflammation of the synovial membranes; depositions of pus and tuberculous abscesses in different organs of the body, viz. in the brain, lungs, heart, liver, spleen and kidney.

"Now when it is considered that abscesses have formed in various parts of the body from the ligature merely of a vein, as of the saphena*—that pus was deposited under the skin of the fore-arm in the case of Brancher,—that rapidly destructive inflammation in the knee-joint took place in the case of Arnold,—that the same occurred in the eye in the case of Dodging,—that where symptoms of inflammation of the chest were observed during life, the effects witnessed, on examination after death, were of very disproportionate degree and extent,—and that effusions of coagulable lymph, and sero-purulent fluid into the chest, together with abscesses in the lungs, were found where no symptoms had indicated their existence;—I say, when it is considered that *all* these consequences ensued from so simple and definite an injury as the puncture, division, or ligature of a vein, it is impossible to resist the supposition that, where similar secondary affections have succeeded to a more extensive wound, they may in reality have originated in the same cause, viz. inflammation of a vein or veins.

"If such view of the subject is correct, we ought on the one hand, in cases where the consequences already mentioned have succeeded to wounds and injuries, whether of the extremities or head, to find evidences of inflammation of the veins of the part which had been primarily or mechanically injured, and, on the other, to meet with similar secondary affections in cases where inflammation of the veins is known to be of common occurrence, as after parturition; that this is actually the case, I shall now proceed to show." 69.

If Mr. Arnott imagines that he can *put out* the theory of the agency of the nervous system with a paragraph he will find himself wofully mistaken. So we are to abandon the notion of nervous agency because forsooth it is "undefined and unintelligible." It is cutting the knot to be sure to destroy at one fell swoop the powers of that system which connects us with the external world, which is the source of our pleasures and our pains, and does more to produce and to modify disease than each and all of the other systems of vessels or of parts that make up the organic machine. Is man distinguished from other animals by the superior arrangement of his bloodvessels, his muscles, or his bones? Certainly not, for many of the inferior creatures shew contrivances as wonderful and arrangements as perfect as the lord of the creation. No, it is in the complexity and the perfection of his nervous system that man stands pre-eminent; it is in that, and in that almost alone. And yet there is a kind of school in modern times who would throw this system overboard in the consideration of disease, who because they cannot demonstrate its agency deny it, and would seem to consider the brain, the

* "Carmichael in Trans. of the King and Queen's College of Physicians. Vol. II. p. 346."

cerebral and spinal nerves, and the intricate ganglionic system as leather and prunella, as a bug-bear for grown children to be laughed at by their philosophy!

Quis furor iste novus; quo nunc, quo tenditis?
Heu miseri cives!

They refuse all belief to, they treat with contempt the operation of the nervous system because it is "undefined and unintelligible." When a man receives a blow at his scrobiculus cordis and dies as if struck by a cannon-ball, we say that it is through the medium of an impression on the nervous system, and yet we can neither define nor understand its operation. A piece of bad news has produced the jaundice in a few short minutes, a deep impression of grief or terror has turned the hair of a young man grey in a single night, but would Mr. Arnott dispute in such cases the agency of the nervous system, albeit that neither he nor any man can define or understand it? He could not, he would not be so bold. We fear it is the mania for morbid anatomy which is operating injuriously by blindidg men's eyes to every action in the living body that is not capable of mathematical demonstration. We have lately got so much into the habit of *bottling* disease, that we fancy no morbid process can go on, which we are unable to shew in spirits on the shelves of a museum.

To revert to the operation of the nervous system in the present description of cases more particularly, we believe that it is not so contemptible as Mr. Arnott would wish us to imagine. If a patient after a slight operation become suddenly affected with an insidious visceral inflammation and die, and if upon dissection the original wound is found nearly healed and no other tangible cause for the secondary phlegmasia is discovered, must we not refer its occurrence to some more occult and inexplicable agency? We may slight the nervous system certainly, but we only pass from the mud to the mire, and abandoning a feasible solution of a difficulty obtain none at all. Take for instance the following case which we witnessed at St. George's Hospital.

Case A.* A young man, four or five and twenty, had part of a prepuce thickened after paraphymosis removed by Mr. Keate on the 20th of Feb. 1829. Next day the prepuce was swollen and the patient feverish; on the 22d the local uneasiness was relieved but the patient was unusually nervous and irritable; on the 23d he was in a state of extreme prostration and at noon of the 24th he died. He had not been affected with cough or the slightest dyspnœa throughout.

Sectio Cadaveris. Nothing particular about the penis—wound nearly healed—no suppuration nor any thing like it, and no tumefaction of the prepuce. Pleuræ on right side of thorax bound together by old and recent adhesions—middle and inferior lobes of right lung united by a flake of strong, recent, yellow lymph, half verging into pus—inflammatory *engouement*, and in some places almost hepatization of the lung. A few flocculi of recent lymph between the pleuræ on the left side—this lung very extensively hepatized and impervious to air from recent pneumonia. Arachnoid membrane of

* We have marked the cases brought forward by ourselves with the capital letter A—B, &c. to distinguish them from those of Mr. Arnott.—*Rev.*

brain opaque with serum effused between it and the pia mater—some fluid in the ventricles.

We leave Mr. Arnott to explain the quomodo of the pleurisy and inflammation of the lungs in the foregoing case, in which it was evident that there was no phlebitis. In the following the evidence is also very strong against him.

Case B. — Childs, æt. 66, of a bad habit of body, had the right breast amputated for scirrhus at St. George's Hospital on the 26th of Feb. by Mr. Brodie. A very slight secondary hæmorrhage occurred but required no removal of the dressings, and from the 27th of February to the 2d of March she appeared to be doing very well. On the latter day she had a rigor, followed by sickness and fever, and on the 3d an erysipelatous blush appeared about the right breast and shoulder; breathing rather qick—expression anxious—wound looking healthy. On the 4th she felt chilly now and then and had a little pain in the right side on inspiration—wound healthy. In the night she complained of pain in the left lower extremity, which on the 5th presented diffuse swelling, tenderness, and a glossy state of skin, with a slight patch of redness near the inner malleolus; pulse rapid—delirium—Hippocratic countenance. On the 6th the whole extremity was mottled, cold, and in a state of gangrene; the wound was dry and its lips gaped. About 2 p. m. she died, eight days after the operation.

Sectio Cadaveris. Nothing particular about the wound—a couple of drachms of pus in the pectoralis major in the neighbourhood. Leg in a state of mortification with vesications, &c.—muscles and cellular membrane sloughy and semi-putrid—a purulent depôt in the cellular membrane behind the malleolus internus—pus in the ankle-joint without ulceration of its cartilages—thoracic and abdominal viscera sound—head not examined. The femoral and tibial vessels, both artery and vein, were carefully examined by Mr. Brodie *and found to be perfectly sound.*

This case does not square Mr. Arnott's doctrines, but facts are facts. We shall now resume our analysis of the memoir.

AFFECTIONS OF VISCERA, JOINTS AND CELLULAR SUBSTANCE AFTER INJURIES OF THE EXTREMITIES.

In the four following cases depositions of the above kind were connected with unequivocal phlebitis.

Case 1. Under Mr. Arnott's own observation.

J, R. æt. 52, had the left leg amputated on the 18th November, 1826, on account of mortification of the foot succeeding to a severe bruise from the tread of a horse. Two veins were necessarily tied, the wound did not unite, much constitutional disturbance with great depression succeeded, and death took place on the 3d of December. *On Dissection:*—much sero-purulent fluid in the left cavity of the thorax, and coagulable lymph on the pleura pulmonalis—a small abscess in the right lung—capsule of the left hip-joint distended with purulent matter, and its cartilages ulcerated—similar appearances in the opposite hip-joint—coats of the saphena vein thickened and its cavity for the last two or three inches of its course filled with pus unconfined by any lymph.

Case 2.* A man with compound fracture of the left leg, was attacked after a time by fever, rigors, and a yellow colour of the skin. He died within a month. *On dissection* :—four abscesses in the right lung, several in the left with sero-purulent fluid in the pleural cavity. Crural vein inflamed and its cavity filled with purulent matter; the inflammation extending as high as the cava.

Case 3.† Henrius, æt. 19, had the second metatarsal bone of the right foot amputated. On the 9th day the skin became jaundiced and a purulent deposit formed on the back of the left hand; on the evening of the 10th he died in great exhaustion. *On dissection* :—a number of small abscesses in the left lung—infiltration of the cellular substance of the left fore-arm and arm with pus—an ounce and a half of thin yellow pus in the left shoulder-joint without inflammation of the synovial membrane—veins on the dorsum of the foot red, thickened, and filled with pus.

Case 4.‡ Frederick Wells, a robust countryman, æt. 25, had the right leg amputated for compound fracture of the metatarsal bones on the 9th of June, four hours after the accident. The stump became sloughy, the complexion sallow, he had rigors, pain was felt in the course of the vessels and he died nine days after the accident. *On dissection* :—several purulent depôts in right lung—liver large and ecchymosed upon its surface—femoral vein filled with pus from the ham to the point where it is joined by the profunda, and its inner surface coated with thick lymph.

"Sero-purulent effusion into the chest—abscess in the lungs—disease of the joints and cellular substance having been found to succeed to Phlebitis simply, may not the same occurrences in these four cases be referred to the inflammation and suppurration of the veins which existed?" 73.

It might or might not, but supposing that cases are brought forward in which these visceral depôts were to all appearance unaccompanied with phlebitis, would they not shake the doctrine as one of universal application? But we do not consider it as proved beyond dispute that inflammation of the veins was the cause of the depositions, even in the four cases cited by Mr. Arnott, as strong ones too as any that he could select.

In the 4th case, for example, the patient died on the ninth day after the operation with phlebitis and purulent deposites in the lung. Now the deposites if a consequence of phlebitis at all are a *secondary* consequence, occurring after the phlebitis itself has existed a certain length of time. In Case 5 of Mr. Arnott's paper, when unequivocal inflammation of the vein after venesection was followed by the formation of small abscesses in the lungs, the patient did not die till the end of the seventh week. In a case which we witnessed at St. George's Hospital, where phlebitis after venesection was followed by destructive suppuration in the right shoulder and knee-joints, the patient lived upwards of six weeks :—in fact, if the reader will glance at the eighteen cases of phlebitis succeeded by suppuration in various parts, detailed in the first division of the present memoir, he cannot fail to

* Palletta, Exercitationes Pathol. Milano, 1820, p. 21.
† Velpeau, Revue Médicale, Juillet, 1826, p. 68.
‡ Lond. Med. Gaz. Vol. II. p. 127.

observe that in most of them a certain space of time elapsed before the developement and fatal termination of the secondary suppurations in question. The bearing of these statements on the present subject must be obvious, for if a patient dies on the *ninth or tenth day* after amputation with phlebitis *and* purulent deposites in the viscera, they would lead us to hesitate before we yielded implicit assent to the opinion that the latter depended exclusively *on* the former. The same cause, an operation or injury, which produced suppuration in a vein might also produce simultaneous or nearly simultaneous purulent infiltrations elsewhere.

But Mr. Arnott will probably deny, as indeed he does by implication in more than one place, that such visceral deposites take place at all independent of phlebitis. Setting aside the cases of *Carey* and *Childs* which we have already related, we shall endeavour to prove by the mention of other cases that occurred under our own observation that the connexion of the two diseases is not of the intimate nature our author would lead us to imagine. We shall first mention two instances of phlebitis without depôts and then some of depots without phlebitis.

Case C. David Lawrence, æt. 56, admitted into St. George's Hospital October 23d, 1827, under Mr, Brodie, for a varicose state of the veins of the right leg and foot, and a small ulcer near the inner ankle. He said that some years previously a cluster of small veins over the head of the tibia had inflamed, become solid, and subsequently obliterated or nearly so;—at the time of his admission no trace of them remained. On the 1st November one of the largest veins winding round the inside of the thigh to the saphena was found to have become partially filled with coagulum, and appeared to be thickened in its coats; it was rather tender on pressure. He went on well till 6, a. m. of the 15th, when he was seized with a sharp rigor; he had malaise during the day, and suffered in the night from pain in the obstructed vein. Next morning inflammation of the saphena, with swelling of the thigh, &c. was established, he became incoherent, and on the 17th gangrene of the limb, without vesications, ensued. At 2, p.m. he died.

Sectio Cadaveris. Cellular membrane of the thigh loaded with serum—coats of the inflamed veins much thickened, and their cavities filled with loose broken down coagula—internal venous tunic from the groin to the heart stained of a modena colour by the blood which was universally fluid—heart itself flabby—inner coat of the aorta and its branches stained like that of the veins, but of a brighter tint. *Nothing unusual found in any of the great cavities.*

Case D. Martin Griffin, æt. 35, admitted into St. George's Hospital January 28th, 1829, under the care of Mr. Brodie. *Right* lower extremity generally swollen, pitting on firm pressure, increased in temperature and painful at nights—extreme tenderness in the course of the saphena major vein, especially in the thigh, where its coats were thickened and felt like a hard cord beneath the integuments—other cutaneous veins very full and tortuous—health not much affected. Five months before admission had a severe bowel complaint from which he recovered, but exposure to wet and cold produced a relapse with rigors, sickness, and fever. The *left* leg and thigh then swelled and presented precisely the same state of things as the right do now; under the use of leeches, &c. the limb resumed its natural

condition in the course of two or three months. The affection of the *right* lower extremity is only of three weeks' duration, appeared without any assignable cause, and was ushered in by fever. We need not detail the treatment had recourse to, suffice it to say that by the 11th of February the hardness and thickening in the course of the saphena had nearly disappeared and the swelling of the extremity was gone.

Here we see two indisputable cases of phlebitis presenting some points of analogy with each other, but neither evincing the slightest disposition to deposites in distant parts. We shall now reverse the order of phenomena and relate some cases where the latter were discovered without any appreciable inflammation of veins.

Case E. *Depôts in the Lungs after Amputation.* John Cooper, æt. 14, of scrofulous aspect, from the country, was admitted April 9th, 1828, under the care of Mr. Brodie, with necrosis and abscess of the left tibia. On the 24th amputation was performed above the knee, and a good many vessels required to be tied. The pulse after the operation continued high, and the stump put on a sloughy appearance. On the 4th of May there was a disposition to vomiting and pain on pressure of the abdomen or thigh; on the 6th he was attacked with purging and next day began to be delirious; in the evening of the 11th he died. The quickness of the pulse and excessive irritability throughout were remarkable; he had no rigor as far as could be ascertained.

Sectio Cadaveris. Inflammation of pleuræ on right side, layer of recent lymph, about an ounce and a half of sero-purulent fluid—no fluid on left side but preternatural vascularity of the pleuræ, especially in spots corresponding to superficial deposites of pus, some as large as hazel nuts interspersed over the surface of both lungs. Liver rather large but healthy—mesenteric glands rather large. Stump sloughy and the bone protruding—quantity of dark coloured fetid pus burrowing in the cellular membrane between the origins of the adductors longus and magnus—periosteum in parts detached from the bone by pus insinuated between them, and in parts actually sloughing—*blood-vessels split open and found to be free from inflammation and to contain no pus.*

Case F. *Depôts in the Lungs after Compound Fracture.* Henry Rose, æt. 25, a drayman, admitted October 1st, 1828, under the care of Mr. Brodie with comminuted compound fracture of the left leg into the ankle-joint. Diffuse inflammation of the cellular tissue with a dark brown tint of skin supervened, the cellular membrane sloughed extensively, and free scarifications or rather incisions were employed with much benefit to the limb. On the 7th, he was hurried in his answers; on the 8th the conjunctivæ were muddy and the skin beginning to be yellow; on the 9th the billious tint was distinct and he complained of pain in the right side of the chest and hypochondrium increased on inspiration, coughing, or pressure; on the 10th the discharge from the limb was more scanty; on the 11th he had several rigors; in two or three days from this period he died.

Sectio Cadaveris. Cellular texture of leg beneath the skin and between the muscles in a horrible sloughing disorganized condition—on the outer and inner side of the thigh it was better, but on the posterior part it was in a very bad state—*femoral vessels perfectly healthy*—traces of recent pleurisy

in both sides of the chest—one small depôt in the upper part of the right lung—several large and sloughy ones at the lower margin of the left.

Case G. *Serum and Lymph in the Pleura and Pus in the Knee-joint after Erysipelas.* Joseph Smith, æt. 53, admitted Aug. 27th, 1828, under the care of Mr. Brodie with extensive varicose ulcers of the right leg and thigh. On removing the strappings which were used, on the 5th Sept. the limb was found to be the seat of severe erysipelas at that time prevailing in the house. The tint of the erysipelas was dusky, the depression of the system considerable. On the 8th the erysipelas was fading in some degree, but the skin had a yellow tinge, the manner hurried, no pain on a full inspiration; on the 9th the erysipelas had spread up the right side of the body and was complicated with vesications, the countenance of decided billious hue. He died in the course of the evening.

Sectio Cadaveris. Textures of the limb not gangrenous, but the surface somewhat purple coloured—right knee-joint found filled with pus, its cartilages ulcerated, and its synovial membrane thickened—femoral vessels healthy but stained as was the aorta—serum and lymph in either cavity of the pleura especially of the right with pus on the pleura pulmonalis.

We think these three cases conclusive in proving that purulent depositions may take place independent of any inflammation of the larger veins. We might multiply instances of the same kind after compound fracture in cases that have fallen under our own observation, but such a proceeding would merely tire the patience of our readers without affecting the question at issue. We shall presently discuss the theory, for such it is, that inflammation of the *smaller* branches of the venous system is sufficient to produce these secondary depositions, and in the mean time pass on to—

AFFECTIONS OF THE VISCERA, &C. AFTER INJURIES OF THE HEAD.

"Abscesses of the liver after injuries of the head long excited much curiosity, and a variety of speculations were indulged in, to account for the occurrence. They were attributed by some to an increased quantity of blood returning from the head through the superior vena cava, proving an obstacle to the ascent of that through the inferior; by others, to a smaller quantity of blood being carried to the brain, and consequently a quantity being sent to the abdomen: they were attributed by some to concussion of the brain, and the nervous system was supposed to be the principal agent in their production; by others, they were referred to direct injury of the liver at the time of the accident. The first two of these speculations fell to the ground, when it was remarked that abscesses occur in the viscera of the chest, as well as in those of the abdomen, after injuries of the head, *and the two last, when it was observed, that they have taken place when neither the brain nor the liver have been the subject of concussion or of direct injury.*

"But of what nature are the injuries of the head, to which secondary affections of the viscera, of the abdomen, and chest succeed, and what are the circumstances under which these occur? Upon neither point do systematic writers afford us any information; and those whose attention has been more particularly directed to the subject have been too much occupied with their own hypotheses, and their own limited observation, to allow them to form a comprehensive and correct estimate of these circumstances.

"With a view of supplying this deficiency, and of enabling us to arrive at more satisfactory conclusions as to the origin and cause of secondary affections in distant parts after

injuries of the head, I have referred to a number of cases, and taking every one which presented itself, I have noted the following particulars." 74.

We cannot forbear remarking with how impotent a blow the doctrine of nervous agency is supposed to be overthrown, and how premature the conclusion that *because* visceral abscesses take place independent of any direct injury to the encephalon, they must necessarily be also independent of its influence. It is *pure* surgery in perfection to imagine that the mysterious agency of the nervous system is only aroused by a blow or a bludgeon! The brief but sufficiently complete details of thirty-three cases of the secondary consequences of injuries of the head are furnished by Mr. Arnott. For these we must refer to the memoir as there is no necessity for our transcribing them here.

"From a consideration of these cases, it appears that affections occurring as secondary to injuries of the head were observed, in twenty-one, seated in the abdominal viscera;* in five, in the thoracic; and in six, in the abdominal and thoracic conjointly. That they consisted of collections of pus in the liver and in the lungs; and of effusions of pus and seropurulent fluid into the cavities of the chest. That combined with some of these, there was further observed, a deposition of purulent matter, in one case, in the substance of the heart; in one in the kidney; in one in the spleen; and in one, under the integuments of the back; in one, albuminous effusion on the surface of the intestines; and in one inflammation of the liver, without the formation of matter. In two cases, inflammation of the surface of the liver without suppuration was the only morbid appearance observed. In one case, an affection of the joints, and the deposition of pus into the cellular substance around them occurred without any disease of the abdominal or thoracic viscera having been noted.

"The injury which the head had sustained in these cases consisted, in twenty-three, of fracture or fissure of the cranium, in all compound, with the exception perhaps of two, where the circumstance is not stated. In ten, the osseous covering of the brain was neither fractured nor fissured; but with the wound of the soft parts, which uniformly existed, there had been in several a portion of the outer table and diploe sliced off, whilst in all, the bone seems to have been exposed. The wound of the soft parts was in several instances of trifling extent, and had, in some nearly, and in one actually, healed over when the unfavourable symptoms commenced; but in these cases disease of the bone seemed to have remained, as the pericranium now became detached. With regard to the morbid appearances within the cavity of the cranium, it will be sufficient to state, that whilst these vary considerably, in several there was inflammation simply of the dura mater, without any appearance of purulent matter, and that in three instances no diseased changes whatever were observed. In short, the only circumstance these thirty-three cases have in common is a wound of the soft parts.

"The general course of these cases seems to have been this, and in the great majority,

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* "Although these thirty-three cases show the nature of the secondary affections succeeding to injuries of the head, they cannot be considered as offering a fair representation of the comparative frequency of the occurrence in the abdominal and thoracic viscera. Previous to the time of Morgagni, abscess of the liver subsequent to such injuries had in a measure engrossed attention, and accordingly it will be seen that, out of thirteen cases from writers previous to his time, in twelve, disease of the liver is noted, and in two of these only, the condition of the thoracic viscera mentioned."

twenty-four, it is so stated, that the patient for some time did well, having recovered his consciousness, where this had been lost, which was frequently not the case, was free from fever, and the wound suppurating kindly; that afterwards unfavourable symptons took place, consisting of fever, rigors, nausea and vomiting, delirium, yellow colour of the skin, and sometimes, shortly before death, pain in the right hypochondrium, or affection of the chest. There was some difference in the period at which these symptoms appeared; but of nineteen cases, the earliest of which was the seventh, and the latest the twenty-fourth day, the average was between the thirteenth and fourteenth day after the accident. The average period of the fatal termination of the same cases was between the twenty-second and twenty third days, the earliest being on the fifteenth, and the latest on the thirty-seventh subsequent to the injury. In one instance, not included in the above number, the patient did well until the eightieth day, when, on attempt being made to remove a portion of bone adhering to the dura mater, general disturbance took place, and death in a few days. In another exception to the more ordinary periods, the same event occurred four months and a half after the receipt of the injury." 97.

The foregoing are strict deductions from the cases and unexceptionable in every respect; the following remarks are of a somewhat different cast:—

"From the preceding summary, I think it will appear, that abscesses and inflammations occurring in the viscera of the abdomen and chest, after injuries of the head, present a resemblance to similar affections succeeding to wounds of other parts of the body, sufficient to justify the inference, that they arise from the same cause. That cause, I ventured to suggest, might be inflammation of the veins,—the consequent productions of pus in their cavities, and the entrance of this into the circulation. And, in accordance with this view, we find that in the only cases in which the state of the part is described, (number 21, from Schmucker, and number 32, which occurred in St. Thomas's Hospital) inflammation of the superior longitudinal sinus existed, its cavity in both instances, containing purulent matter, in the one, with a firm, fibrinous coagulum, and in the other, with a layer of organized lymph on its inner surface. But we need not confine ourselves to inflammation of the sinuses within the cranium in cases of this description. It must be evident, that this process taking place in the numerous veins which ramify between the two tables of the skull, and in those distributed to the soft parts externally, will be attended with similar consequences to those which succeed to phlebitis in other parts of the body.

"With respect to inflammation of the cerebral sinuses, after injuries of the head, I may here mention, that Schmucker* relates another case, where a patient having compound fracture of the os frontis, did well for ten days; unfavourable symptoms then occurred, and he died on the eighteenth, having for the last two days complained of pain in the right side. In this instance, a spiculum of the inner table of the skull was found penetrating the superior longitudinal sinus, which, in its anterior part, contained an atheromatous looking matter, and posteriorly, pus mixed with blood and polypous concretions. The condition of the abdominal and thoracic viscera is not described; but it is subsequently remarked, that the inflammation of the liver in this case would undoubtedly have ended in suppuration, had not death intervened." 98.

We cannot compliment Mr. Arnott on the logic or the fairness of the preceding observations, in fact we consider them as shewing unwittingly but broadly the cloven foot of theory. In only *two* cases out of 33 was inflammation observed in any of the sinuses of the head, *ergo*, says Mr. A., inflam-

* "Chirurgische Wahrnehmungen. Erster Theil, p. 160.

mation of such veins or sinuses is the essential part of all! This reductio ad absurdum which the argument so palpably admits, seems to have occasioned some premonitory qualms in our aurhor's mind, for he shortly abandons his position and takes up a new and extraordinary line of defence;—it must be evident, says he, that inflammation taking place *in the numerous veins which ramify between the two tables of the skull, and in those distributed to the soft parts externally*, will be attended with similar consequences to those which succeed to phlebitis in other parts of the body. Now this is evidently theory and nothing else, a theory too which cuts its own throat. In the first place, Mr. Arnott assumes that there is inflammation of the smaller veins, and in the next place he assumes that inflammation of those small veins is attended with the same symptoms as that of the larger ones. The first supposition may or may not be the case, and the second is extremely unlikely. The question however had better be mooted something more in detail.

It must be evident, to use Mr. Arnott's hasty expression, that he has no more right à priori, to *suppose* inflammation of the smaller veins in such cases as injuries of the head, than we have to *suppose* it in cases like those of psoas abscess where immense destruction of parts is occasioned by the burrowing and collection of purulent matter. In vomicæ of the lungs too we are all aware how frequently blood vessels even of considerable size and veins of course, amongst them, are implicated in the adhesive, suppurating, or sloughing actions going on in the pulmonary structure. In the enormous and ruinous sloughing abscesses that invade the subcutaneous and deep-seated cellular membrane of the thigh in individuals of strumous habit, abscesses by no means very chronic in their march, the smaller veins must inevitably become inflamed. Are purulent deposites then frequent in these cases of psoas abscess, vomicæ, &c.? By no means, indeed we never saw one instance of their occurrence under such circumstances. It would be unnecessary to pursue the subject any further as we think Mr. Arnott has failed to make out his case, and instead of advancing any sober or convincing facts, has put forward a mere assumption, unsupported by aught but a *brusque* and magisterial tone. The first part of the memoir affords a strong contrast to the present in this respect. In that Mr. Arnot brought forward a most valuable collection of cases of phlebitis and offered few opinions that were not pretty fairly deducible from them, but we still know too little of the proximate cause of the purulent deposites to justify an author in dogmatizing on their nature. We now pass on to—

AFFECTIONS OF THE VISCERA, JOINTS, EYE, CELLULAR SUBSTANCE AND SKIN AFTER LABOUR.

This is really a very rambling kind of chapter and a strange compound of facts and hypotheses, strict conclusions and bold assumptions. The author commences by citing Drs. Clark and Davis, M. Velpeau and others, to prove that inflammation of the uterine veins is by no means of unfrequent occurrence, and proceeds to observe that there is sufficient evidence to shew that it is followed by various secondary affections. In a case of Mr. Wilson's when inflammation had extended from the uterine and spermatic veins to the cava an abscess was found in the liver; in a case of M. Louis' there were abscesses in the right lung and inflammation of the right spermatic

vein; in a case that occurred in the St. James's Infirmary under the care of Mr. Baker, there were great effusion of turbid serum and lymph into the left side of the chest, and a portion of the lung as large as a walnut in a state of complete gangrene, with decided inflammation of the left spermatic vein, which was filled with lymph and pus; and finally, in a case lately received in the Middlesex Hospital under the care of Mr. Mayo, from the Queen's Lying-in Hospital, severe erysipelas supervened to labour, matter formed on the outside of the left fore-arm, back of the left hand and over the right wrist, whilst gangrene attacked the integuments of the right leg and foot. On dissection about a tea-spoonful of matter was found between the neck of the bladder and symphysis pubis, and pus and sero-purulent fluid were found in the lower half of the left spermatic vein with slight thickening and no lymph.

These are the four cases adduced by Mr. Arnott to demonstrate the tendency of uterine or spermatic phlebitis to give rise to secondary and remote suppurations. For our own parts we must say that they are extremely unsatisfactory and by no means establish the soundness of the conclusion so decisively as Mr. Arnott appears to imagine. The last case is assuredly not in his favour, for if it proves that inflammation of the lower half of one spermatic vein gave rise to any thing it was to *erysipelas*, an etiolological bastard which we shrewdly suspect that Mr. Arnott will be in no hurry to have sworn to him!

The next series of affections which our author proceeds to consider are the affections of the joints which are known to supervene occasionally to parturition. After adverting to the fact of suppuration in the articulations being not unfrequently connected with phlebitis, as instanced in the cases of Arnold, Brancher, and Dogherty, and quoting Dr. Hennen, Mr. Rose and others to show that it has been noticed after injuries and operations, all which is in our our opinion undeniable, Mr. Arnott observes:—

"It will be inferred from the preceding course of argument,* that I regard the disease of the joints, in these several cases, as having been connected with inflammation and suppuration of the veins of the part which had been the seat of mechanical injury. To others, this opinion may seem scarcely warrantable by the degree of knowledge which is yet possessed upon the subject; so strong, however, is my own conviction of the reality of such connexion, that in the following case, where no injury had been sustained, the disease of the joints, and the occurrence of abscesses in different parts of the body, led me to anticipate the existence of inflammation and suppuration of the veins, which anticipation being confirmed by dissection, tends evidently to establish the accuracy of the previous conclusions. The subject of the case was a patient in the Middlesex Hospital, who attracted my attention soon after he had been transferred from the physician's ward to that of the surgeon." 109.

Case. T. Griffin, æt. 30, became feverish without assignable cause, was attacked with rheumatism in all his joints especially the left knee and right shoulder, and several abscesses formed in the right side of his neck. He entered the hospital and went out relieved in five weeks, but was exposed to wet and cold, had a relapse, and was five weeks in bed without advice. In Nov. 1827, six months from the first attack, he re-entered the hospital

* This a misapplication of a term, as what went before was merely an enumeration of certain facts; *argument* is a suspicious word when applied to such.

under Mr. Bell, with great swelling of the left knee which was almost immoveably flexed, loss of power over the right arm, an abscess over the inferior angle of the scapula and another over the right sacro-iliac symphisis. The swelling of the knee-joint increased, an abscess formed over the bend of the fibula, and the head of the tibia became dislocated backwards, another abscess formed over the right shoulder, and on the 13th Aug. 1828, the man died. *On dissection*:—The cartilages and ligaments of the left knee and right shoulder-joints completely destroyed, and the heads of the bones surrounded by a quantity of thick purulent matter contained in a cyst formed by a blended mass of muscle and cellular substance—right hip-joint healthy —femoral vein twice its natural size, greatly thickened in its coats, and filled with lymph and pus slightly tinged with blood. The same appearances were observed in the saphena, profunda, epigastric and smaller veins, and extended in the femoral from two inches below the profunda to the entrance of the internal iliac when they ceased; nothing unusual in the viscera.

"It is to be remarked, that this patient had never complained of the right thigh, or leg; it is true, he had been confined to his bed for the last eleven months, but retained the power of moving this extremity. Latterly, both this leg and the other had become œdematous. No cause could be discovered for the inflammation of the veins; the limb shewed no sign of external violence, with the exception of a small cicatrix on the inside of the leg." 113.

So much for the "prefatory remarks," the gist of which seems to be, that affections of the joints have been noticed after injuries and operations, and that Mr. Arnott has seen a case where such affections were connected with inflammation of the femoral vein and its branches. He next proceeds to shew that violent diseases of the joints are also observed after parturition.

That a violent and destructive disease of the joints takes place in the puerperal state, although not attracting particular attention, the following details will show. Mr. Cheston, in his chapter 'On White Swelling,' treating of suppuration of a joint, its symptoms, and the danger which attends it, has the following note:—'A critical deposition in the joints is frequently productive of a simliar event, (viz. suppuration,) and many women in particular, as Dr Simpson has observed, have contracted it under the diary fever they are subject to in childbed. Of this a remarkable case has lately fallen under my care, where the patient was saved by a timely amputation.' Unfortunately the case is not related, and Dr. Simpson's remark is merely this, 'several of those I have had under these cases, could give no account of the rise of the trouble. Some women have contracted it under the diary fever (the weed) they are subject to in child-bed.'

"The following case detailed by M. Cruveilheir,* in a paper entitled 'Usure des Cartilages Articulaires,' will be found interesting, both from the period at which it occurred, and the nature of the affection.

"A lady, after a severe labour, was attacked by acute articular rheumatism, which successively affected all the joints. The pains diminished, but did not subside; by degrees, the knee-joints became stiff, and she heard or felt a crepitation on the least motion, even in turning in bed. The hip, the shoulder and elbow-joints, those of the wrist and metacarpus, soon became affected in a similar way. Various remedies were tried. Moxas were applied to one knee, and were imagined to afford relief; but at the end of three months, which time they took in healing, the joint was as stiff as before. M. C., who had latterly seen the patient, recommended daily motion of the limb, but the pain which this occasioned could not be borne. It was hoped that anchylosis might put a stop to the sufferings, but this did not take place. At length, in endeavouring by examination of one

* "Bibliotheque Médicale. Janvier, 1827, p. 80."

of the joints of the fingers to ascertain the nature of this singular disease, a grating was recognized, and the same sensation being verified in all the affected joints, palliatives only were henceforth resorted to.

"On enquiring of Dr. Merriman concerning a disease of the joints in puerperal women, that gentleman informed me that he had seen such cases, but that he did not know of one which had terminated favourably.

"In the following case communicated to me by Dr. Robert Lee, no examination of the body was made; but the relation of it here, may, by calling attention to the disease, lead to an examination, in fatal cases, of the affected joints, and also into the state of the uterine veins, with inflammation of which, I believe the affection of the joints to be connected.

"'Mrs. A. æt. 30 was delivered on the 1st of June, 1828, after a tedious labour. A portion of the placenta having been retained in the uterus several hours after the birth of the child, a profuse hemorrhage took place before it was extracted. Until the 10th she appeared to recover in the most favourable manner, when a violent febrile attack was experienced, with delirium, and a painful diffused swelling soon after took place around the right knee-joint.

"On the 13th, when I first saw her subsequent to delivery, the febrile symptoms continued unabated, she was delirious, and there was a peculiar expression of wildness in the countenance. The muscles of the face and extremities were affected with tremors. The pulse was 130, and very weak; respiration hurried and anxious, with frequent cough. The skin hot and dry, the tongue was of a glossy red colour and moist. Thirst not urgent, bowels open. There was no sickness or vomiting, the abdomen was uniformly soft, and pressure over it produced no uneasiness. The right knee-joint was stiff and swollen, but the integuments were not discoloured. On the 14th, the symptoms continued, and in the night a painful circumscribed swelling had taken place in the middle of the calf of the right leg, where the integuments were hot, and of a dark red colour. On the 18th, there was a marked remission of all the symptoms, and for ten days it was hoped she would recover. From the 1st of July till the 24th, when she died, (completely worn out with diarrhœa, fever, and the painful affection of the extremities,) the right knee joint had become much more swollen, and a considerable effusion had taken place into it. Over the right radius and ulna, near the wrist, a painful diffused swelling also took place without discolouration of the integuments, and for a week she suffered excruciating pain in the left ankle and right shoulder-joint, but in neither of these situations, was any thing, except a slight puffiness to be perceived.'" 117.

Mr. Arnott alludes in a note to a case then under his observation of destructive disease of the right knee-joint consequent to delivery. Death not having taken place, the actual state of the veins is of course uncertain, and the case so far only goes to confirm the statements respecting the liability of parturient women to articular disease. The following passage is the only proof of the dependence of these affections on phlebitis which our author offers:—

"Upon the connexion of this affection of the joints in puerperal women with inflammation of the veins, there is an *appearance* of direct evidence in two of the cases related by M. Velpeau, in his paper on Phlegmasia Alba Dolens, although the description is somewhat incomplete. In one of these, death took place on the sixtieth day after labour, in the other, on the twenty-sixth, under great constitutional disturbance and exhaustion. In both, purulent matter was contained in the hypogastric and femoral veins. In the first case the interpubic cartilage was softened, and pus was found in this situation; the same appearances were observed in the left sacro-iliac symphysis; the hip joint, also, contained purulent matter In the second instance, the sacro-iliac and pubic symphyses were in a state similar to that just mentioned." 118.

It would be ridiculous to argue on a theory so fragile, on facts so feeble as those contained in the preceding paragraph. Mr. Arnott must surely

intend to *hint* the connexion between phlebitis and those affections of the joints, and not to assert that he has proved it.

"The last circumstance to which I shall at present allude, is the occurrence in the puerperal state, of a disease of the eye, similar to that which took place in the instance of Dodging from the inflammation and suppuration in the vena saphena. It will be recollected that in this case the corneæ became opaque, the vessels of the conjunctivæ injected, and that after death, destructive changes were found within the globes. Now, although a remarkable, this is not an isolated instance of a peculiar disease of the eye succeeding to inflammation of a vein from mechanical injury." 118.

Our author accordingly details the case of Mr. Wardrop in which the jugular vein was found obliterated after the operation of tying the carotid and in which the left eye sloughed and collections of matter took place in several parts of the body. The case is too notorious to allow us to go over the ground again.

"When we consider the circumstances of this case, the venous hemorrhage, the constitutional disturbance, the formation of abscesses, and the appearances presented on dissection, and compare them with the consequences which have been observed to follow inflammation and suppuration of a vein, and the occurrences in the case of Dodging, can it be doubted that the affection of the eye in this instance, arose from the inflammation of the jugular vein, and from the entrance of an inflammatory secretion, probably pus, into the blood?

"A disease of the eye, similar to that observed in the two cases obove mentioned, occurs in the puerperal state, and has been described by Dr. Marshall Hall, and Mr. Higginbottom, in a paper published in Vol. XIII. of the Society's Transactions, under the title of 'Cases of Destructive Inflammation of the Eye, and of Suppurative Inflammation of the Integuments occurring in the Puerperal state, and apparently from Constitutional causes.' In all of these cases, six in number, five of which came under their own observation, the affection of the eye took place in from five to eleven days after delivery. It was preceded and accompanied by serious indisposition, in every instance terminating fatally, and under symptoms of extreme exhaustion. The affection of the eye was characterized by redness of the conjunctiva, intolerance of light, and contracted pupil; rapidly followed by opacity of the cornea, and excessive chemosis. In four instances, dissolution took place before the coats of the eye gave way; in the two others, this occurred during life; and in one, where the process was observed, by ulceration of the coats round the cornea. In both of these cases, the collapsed globe had healed over previous to death. In each instance only one eye was affected, and that the left; with the exception of the case communicated by Mr. Ward, where it does not appear which eye was the seat of disease. With the disease of the eye, there also took place an inflammation of the integuments, first observed on the hand, but on careful examination found in the inferior, as well as the superior extremities, and under which, matter quickly formed. In one case only, there was no such inflammation.

"The authors of this communication conjecture, that the morbid affection of the eye had a constitutional origin. No examination after death seems to have been made in any of these cases.

"Considering the circumstances under which the affection of the eye took place, its characters, and the deposition of pus under the integuments of the body; are we not justified, (on comparing these with the known consequences of inflammation of veins, and the frequency of this affection in those of the uterus after parturition,) in attributing such disease of the eye to inflammation of the uterine veins, and to the introduction of pus into the circulation?" 122.

We really must protest against this species of reasoning which if once admitted into medical writings would sap their genuine inductive character,

and involve us in a greater tornado of theories and speculations than even blind our eyes and din our ears at present. Without one shadow of positive proof Mr. Arnott asks if we are not *justified* in attributing this affection of the eyes to inflammation of the uterine veins, and inquires if it *can be doubted* that it depended on the inflammation of the jugular, in Mr. Wardrop's case. Yes, we answer boldly that the latter *may* be doubted and that we are *not* justified in pronouncing on the former. Had Mr. Arnott contented himself with pointing out the cases in question and remarking the certain degree of similarity between them, he would have stood on ground from which no one could dislodge him because he would have been under the cover of facts. But when on such slender premises he builds such wide assumptions, his position is so precarious that a feather would upset it. We should think that Mr. Arnott's craniological developement must be large in the direction of *constructiveness*, for throughout the memoir and in the latter part of it especially he evinces remarkable talent for what is termed "framing" a theory. We admire the ingenuity but deplore the instability of the workmanship.

"Such are the facts which have induced me to conclude, that the inflammations and abscesses which arise in remote situations, after *injuries*, whether of the extremities or of the head, or after the *process of parturition*, are attributable to the existence of phlebitis in the part of the body primarily affected.

"In concluding these remarks, the object of which has been to point out the relation between the primary and secondary affections in phlebitis, and to establish the introduction of pus, or other inflammatory secretion, from the surface of the vein into the circulation, as the cause of the latter; I have not felt myself called upon to advance any opinion as to the manner in which this cause operates, in giving to some of the secondary affections their peculiar characters,—I allude more particularly to the depositions of pus and lymph, unattended by those changes in the texture of the parts, which usually precede the production of these fluids. I think it right, however, to state, that I must not be considered as regarding the matter so deposited to be actually that which has been brought into the circulation from the inflamed vein or veins. The disease of the eye, in which pus is not deposited, and the affection of the joints, exclusive of other considerations, clearly prove that the question is no longer one of a translation of matter merely, but one which involves the very difficult subject of the pathology of the blood, especially the share which diseased changes in this fluid have in the production of those phenomena which we are in the habit of comprehending under the term of inflammation." 123.

This concludes the memoir, a remarkable and talented one in many respects, and it now only remains to add a few words before parting with the author. It must have been seen already from the tenour of our remarks that we differ from him widely in several points, and think he has exceeded the strict and proper bounds of deduction in others. The paper may be divided into two parts, one embracing facts, the other theories, but both so intermingled, here merely dove-tailed and there amalgamated, that it is difficult to determine precisely the limits of each. We must say, however, that the facts collected by Mr. Arnott are extremely valuable and reflect the highest honour on his industry, research, and discrimination. They prove that phlebitis is a much more common disease than was imagined, that many of the notions of former authors respecting the mode in which it proved fatal, were erroneous, and that it gives a marked and undeniable tendency to produce consecutive and vicarious inflammations, if we may use the term, in other parts. But do the facts prove that phlebitis is the whole and sole cause, or even the most frequent one of visceral deposits

after injuries, especially of the head, and operations? We believe that they do not, and the grounds for our belief or rather disbelief will be found in some measure scattered through the pages of this review.

Again with regard to our author's theories;—we dissent from him in toto respecting the exclusion of the agency of the nervous system, an exclusion that we consider a thousand times more absurd than he seems to think its admission would be. We also dissent from him on many minor points, but our space is too limited now to allow us to do more than again allude to the various incidental remarks and criticisms on which we have already ventured. We cannot say that we think much of the translation of pus, the *metempsychosis*, as it were, of our modern pathologists. The deposits, whether visceral, articular, or seated in the cellular substance, are neither in quality nor quantity related to the secretion of the parent wound or injured part, and it appears to us extremely ridiculous to imagine that suppurations beat up their quarters and take to another more favoured spot in the body, like a tribe of Bedouins in search of a spring in the desert, or an Arab palace under the magic influence of an Aladdin's lamp! To attribute these curious affections "to the very difficult subject of the pathology of the blood," is a supposition that leaves us and them where we were, and we believe after all that the theoretical notions respecting the visceral deposits are not one whit the clearer for the present investigation.

"Well has he said, Athena's wisest son,
"All that we know is—nothing can be known!"

We cannot take leave of the memoir without again expressing the high opinionion we entertain of Mr. Arnott's industry and talents, qualities which we hope will be often applied to the elucidation of professional and scientific questions:—

"Still from their cloistered walks to set them free,
"And bring them to another Castalie."

II.

AN ESSAY UPON THE TREATMENT OF THE DEEP AND EXCAVATED ULCER: WITH CASES. By *Richard Anthony Stafford*, Member of the Royal College of Surgeons, &c. Octavo, pp. 72. London, 1829. Price Five Shillings.

THE comparative absence of "original communications" from the journals devoted or adapted to their reception, has been very apparent of late years. Two causes have conspired in producing this deficiency of such articles in the market: first, the degree of scepticism which, just or unjust, is certainly extended by the public to cases detailed by the parties interested; and secondly, the obloquy, ribald jest, and foul language with which many respectable contributors have been assailed by the low-bred scurrilous fellows that adorn a certain portion of the medical periodical press. These circumstances have operated in strangling much trash that would otherwise have seen the light, and so far they have done good; but they have also kept back very useful information, and deterred many diffident well-informed men from venturing into the gladiatorial arena of the journals. They have also operated in another way and induced men to publish in octavos and duodecimos what

might have done well enough for the substance of a letter to an editor, but cuts a sorry figure when diluted into a book of some seventy or eighty pages. There is scarcely a more unpleasant task than that of reviewing such a publication, for justice requires the veil to be withdrawn which private feeling would hang before the weaknesses of the author. It is a duty however, which the conductor of a critical journal owes to that public which honours him by its support, and coute qui coute it must be performed.

We were led to make these preliminary remarks from perusing the little volume of Mr. Stafford. We think he has acted unwisely in making a five-shilling book out of the materials at his disposal, and *wire-drawing* the substance of some four or five pages into seventy-two. The ductility of his matter may be great, but like certain metals it is weakened in proportion as it is lengthened. The object of Mr. Stafford is to recommend the employment of melted wax in the treatment of deep and excavated ulcers of various kinds, and one or two brief extracts will shew the practice quite as well as the perusal of the whole publication. The composition of the wax is as follows:—four parts of white wax, and one of Venice turpentine; it can be bought at Field's and Son, Wigmore Street.

"The treatment which I am about to recommend is extremely simple; and we shall find, upon inquiry, that its action is founded on just principles, and according to the laws which nature herself pursues. It consists in pouring into the excavation melted wax, of an extremely adhesive quality, and just at that temperature when it is on the point of cooling, and will immediately become solid in the wound. In this manner the under surface of the wax, when cold, comes into close contact with the general surface of the ulcer, and the whole excavation is filled by it. Before employing it, however, it is necessary that one or two precautions should be taken: first, in order to clean the sore, as much of the pus as possible which rests upon it should be absorbed by dry lint; and secondly, in order to avoid burning the patient, the wax should be at that point of heat which is called by chandlers *setting*; that is, a portion of it should cling to the sides of the vessel in which it was melted, and the rest should begin to thicken, and have somewhat of an opaque appearance. In this state it will not be at much more than blood heat, and it can be used with perfect safety. It is adviseable, however, even when so far cooled, that a brush be dipped in it, and that the wax be allowed to drop from that into the sore. After the wax becomes perfectly solid in the ulcer, a strip or two of adhesive plaister may be applied over it, to keep it in its situation; when it may be left until it requires to be dressed again, which will be on the third day after its application. By pursuing this method of treatment, it will be found that healthy granulations will be produced, and appear upon the whole surface of the sore; that it will contract; and that the healing process will proceed very rapidly." 6.

"With regard to the progress by which a sore heals, according to this or any other method of treatment, it is impossible to lay down any precise rule or time, as this must in some measure depend upon its character, its size, the health of the patient, &c.; but the stages by which the reparative process is usually carried on, when treated with the wax, is as follows:—On the removal of the first dressing, the sore generally presents a cleaner surface, being more reddened; and sometimes even in the early stages granulations are distinguishable. After the second dressing they are commonly spread over the whole surface of the sore; on the third, they partly fill up the cavity, which is much contracted; on the fourth, it appears still less; and so on until it is completely closed, and then the skinning process commences. During the course of healing, likewise, it may be observed that the granulations are smaller, more compact, and more florid. The cicatrix also presents a more even surface; it is of a firmer texture, less tender, and does not appear so likely to break out again as the scars of those ulcers which have not been treated according to this plan.

"The superiority of this plan of treatment is, that the sore is healed much more quickly, being, in fact, so rapid, that it is accomplished in one-third of the time usually occupied, and with much greater certainty than where the common methods are employed. It succeeds also where no other remedy will, as may be seen by the cases. It excludes the air from the

wound, shielding it at the same time from external objects; it makes equal pressure upon its surface, and thus supports its tender vessels; and it imitates the process which nature herself pursues, the healing of a sore by scabbing. All these are of great use; for, in the first place, by the exclusion of the air, much irritation and pain is avoided; in the second, by the support it gives to the tender vessels of the ulcer, the cicatrix is of a more firm and solid texture; and in the third, by the scabbing process, it is healed in a more regular manner. In addition to these advantages, the pain, when the wax is upon the sore, is so little, that many of the patients have informed me that they have been almost unconscious not only of its presence, but even of the existence of the sore itself.

"The cases where the plan of treatment I have recommended might be advantageous are, the open and excavated Bubo; ulcers of the legs; indolent scrofulous sores; excavations in the flesh, in consequence of sloughing phagedena; ulcers situated over large arteries; sinuses and fistulous passages, that have been laid open; the sores left by extensive burns, broken chilbains, and, in short, those of any depth, from whatever cause they may arise. In most of the cases I have just enumerated, the wax has been employed; but more particularly in ulcerated legs, open Buboes, and scrofulous sores. In these, of whatever character or description they may have been, the treatment has succeeded, and the healing process has been forwarded with greater rapidity than where the ordinary applications have been used. Its utility does not appear to be confined to any one particular state of the ulcer. When it is extremely foul, and even covered by a sloughy matter, as in Butler's case, on the removal of the wax it has presented a clean surface. Where the ulceration has been extending, its progress has been immediately arrested, and it has shewn a disposition to heal. When the sore has been connected with varicose veins on the leg, it has been attended with equal advantage; and when its character has been of so languid and indolent a nature, that no remedy could excite a healthy action, the stimulus and support of the foreign body, that is, the wax, has, as it were, like a charm, produced strong and florid granulations.

"Although there are very few species of ulcers where this method of treatment might not be successful, yet it offers peculiar benefit in many cases which before defied all other remedies: for instance, in sores situated over large arteries where there is a danger of the ulcerative process being continued into the vessel. Such cases are not uncommon; and, to my own knowledge, several patients have died in consequence of every application having proved ineffectual to stop its progress. In these instances it is customary to apply stimulating remedies; but every practitioner must have observed, that such dressings have too often accelerated the catastrophe they have intended to ward off. Here, then, the use of the wax might be of singular advantage, by producing healthy granulations, and at the same time, protecting the artery. The same plan of treatment might likewise be resorted to in all extensive sores, such as burns; and thus not only might they be made to heal more quickly, but they would likewise be shielded from objects around them. There are some species of ulcers, also, whose peculiar character it is to spread; for instance, herpetic sores, noli me tangere, and cancerous ulceration; and if the principle which I have pointed out as to the action, which this plan of treatment induces in the ulcer, be correct, it might possibly be of infinite service in these cases, in putting an end to, or at least stopping the progress of, the ravages of the disease; and more particularly when it is extending itself into parts so full of blood vessels, that there is reason to apprehend the death of the patient from hæmorrhage. I have not had an opportunity of employing it in any of these cases, excepting in cancerous ulceration, where its effects in producing granulations (which will be seen by the cases) was extraordinary; consequently, I am unable to bring forward any facts to establish its utility, and therefore I merely offer these remarks as a suggestion.

"In conclusion, it is almost needless to say, that whatever local treatment may be applied to an ulcer, it is necessary to attend to the health of the patient; and although in most of the cases where the wax was used, only purgatives were occasionally given, yet if the health be deranged, constitutional treatment must likewise be resorted to." 21.

A great number of cases are detailed which are more adapted for making a book than enriching a journal. We refer the curious to the work itself,—

Where twice ten thousand shake the labouring field.

III.

PROPOSAL OF A PLAN FOR THE INVESTIGATION OF THE DUE ADMINISTRATION OF BLOOD-LETTING. By *Marshall Hall*, M. D. &c.

WE learn from this little brochure that Dr. Hall is prosecuting with his usual zeal, and, we have no doubt, with his usual ability, the very important subject of blood-letting. No remedy is now more general—not even calomel or blue pill—and this fact may assure us that no remedy is more abused. It is certain that if several persons be bled to deliquium in the erect posture, they being of apparently similar strength, but affected with dissimilar diseases, they will be found to have lost very different quantities of blood before the fainting is induced. Dr. Hall has known a patient, not apparently very feeble, to faint on losing four ounces of blood—whilst he has seen other patients bear the loss of 50, 60, or even 70 ounces of blood without syncope. How is this to be explained?

"Its rationale is to be found, I believe in connexion with an equally interesting fact, that different diseases induce in the constitution different powers or susceptibilities in regard to the effects of loss of blood. Each disease appears, indeed to posses its own peculiar and intrinsic virtue in this respect. This is determined by placing the patient perfectly erect, and bleeding to incipient syncope; the quantity of blood which flows is the measure of the protective influence of the disease in one class of cases, and of its influence in superinducing a susceptibility to the effects of the loss of blood in the other.

"An interesting scale of diseases may be formed representing these properties. It would begin with congestion of the head or tendency to apoplexy; inflammation of the serous membranes, and of the parenchymatous substance of various organs, would follow; and lastly, inflammation of the mucous membranes. This part of the scale would be divided from the next by the condition of the system in health. Below this would be arranged fever, the effects of intestinal irritation, some cases of delirium, reaction from loss of blood, and disorders of the same class with hysteria, dyspepsia, chlorosis, and cholera morbus."

Persons in health and of moderate strength, will generally faint if bled in the erect posture on taking fifteen ounces of blood. Dr. H. has known seventy ounces to be taken in the sitting posture, in tendency to apoplexy, without syncope. But this is an extreme case. Patients with pleuritis frequently bear the lossof 35 ounces of blood without fainting. "In bronchitis little more is borne to be lost than in health."

"A stout person in fever will frequently faint on losing ten, twelve, or fourteen ounces of blood. In intestinal irritaion, with urgent symptoms even, the abstraction of nine or ten ounces of blood will generally induce deliquium. In delirium tremens, or puerperal delirium, the patient soon faints from loss of blood. The same thing is still more observed in those cases of violent reaction, which arise from loss of blood itself. In dyspepsia, hysteria, and chlorosis, the susceptibility to syncope from loss of blood is very great. And I have known a patient, of good strength, affected with cholera, faint on taking four ounces of blood, although she had shortly before borne to lose nearly twenty ounces without faintishness, under the influence of inflamed mamma." 5.

The solution of these differences, Dr. H. thinks must be found in the different nature of the diseases themselves. In all those cases, he observes, where the circulation of the heart and larger arteries only is affected, and especially in such as involve irritation or exhaustion, there is early syncope on taking blood. But in such cases as consist in an affection of the capillary circulation, and especially such of these as affect the head, it requires the abstraction of much blood to induce deliquium.

"Syncope is prevented by the influence exerted by this state of the capillary circulation over that of the heart and larger arteries, and over the whole system, and especially over the circulation within the brain; and it does not entirely subdue the morbid action of the capillary vessels even when induced. To induce syncope in pure fever, we have then but to subdue the state of reaction in the heart and larger arteries. In inflammation we have not only to do this, but to overcome the influence of a permanent morbid action of the capillaries; this is especially observed in inflammation of the serous membranes and within the head." 6.

The practical application of this fact consists chiefly in its affording a rule for blood-letting in all cases in which this measure is required to be fully instituted—a guard against undue blood-letting, both in this and some other cases—and a source of diagnosis.

"The quantity of blood which flows when a patient requiring full blood-letting is placed upright and bled to deliquium, seems accurately proportionate to the exigencies of the case. In inflammation much blood should be taken; and much blood will flow before deliquium is induced; in irritation, little blood should be drawn; and there is early syncope from blood-letting. The quantities are even accurately suited, not only to the exigencies of the disease, but to the powers of the system; at least so it appears to me from considerable experience.

"The rule is suited also to the degree and the duration of the disease, for, with each of these, its influence in inducing tolerance or intolerance of loss of blood is respectively augmented.

"It is not less adapted to those most frequent of all events, mixed cases. Inflammation and irritation may be conjoined. For example, there may be mere nephralgia, or absolute nephritis, from calculus, or a mixed case involving both. There may be mingled intestinal irritation, and inflammation. In each of these circumstances, the rule for blood-letting which I have proposed, adapts itself accurately to the demands of these various morbid affections, and to the actual strength and condition of the general system.

"It is difficult to say whether more injury has been done by an undue or by an inefficient use of the lancet. In inflammation we must bleed fully. In irritation we must bleed cautiously. Inefficient blood-letting in the former disease, and undue blood-letting in the latter, are alike dangerous or even fatal to the patient; from both extremes we are guarded by the rule which I propose. By directing the patient to be placed in the erect position, and bled to deliquium, we often take much more blood than we should have ventured to prescribe, in inflammation, and very much less than we might be disposed to direct, in irritation; and in both these cases the rule conducts us to the only safe mode of treatment.

"A further practical application of this fact, flows from the adoption of the rule. In doubtful cases it furnishes us with a fresh means of diagnosis. If much blood has flowed before syncope occurred, we must suspect inflammation; if little, we must suspect that, however similar the symptoms, the case is in fact of a different nature,—perhaps irritation, perhaps exhaustion. For further information on these two states and affections of the system, I must refer my reader to a little work in the press, entitled Researches on the Morbid and Curative Effects of Loss of Blood, in which they will be particularly discussed." 9.

The principal object of this precursor of a larger work is to solicit the co-operation of the author's medical friends in the further investigation of the subject. With the view of obtaining facts, by the multitude of which alone the propositions can be established or corrected, he proposes that, in every case in which full blood-letting is to be instituted, the patient should be placed perfectly erect in a chair or in bed, and bled to the very first appearance of syncope. The quantity of blood taken is then to be noted, and accurately registered in a table. The same thing is to be observed on each repetition of the bleeding. The various facts which he proposes to register may be seen in the following table.

Age and strength of the patient.	Disease, its stage and complications.	Quantity of blood taken.	Effects on the patient and disease.	Appearances of the blood.	Repetitions of the blood-letting.	Effects.

Dr. H. observes, in conclusion, that he does not think it safe, in any case, to bleed to deliquium in the recumbent posture. There can be few, if any cases, in which, if it be proper to bleed fully, danger can accrue from bleeding to the most incipient syncope in the perfectly upright position. Besides, the remedy is at hand. We have only to lay the patient in the recumbent posture, and, if necessary, raise the feet and depress the head.

We shall be anxious to see the promised work, announced by the talented author in one of the foregoing extracts.

IV.

ON THE MODE OF DISTINGUISHING PREGNANCY FROM THE DISEASES WHICH RESEMBLE IT. By *Robert Gooch*, M. D.*

In the recent and very talented work of Dr. Gooch, somewhat more than 50 pages or nearly an eighth part of the whole book is occupied with the above mentioned subject. It cannot be said therefore that we are overrating its importance by giving it a separate article in this Journal. The symptoms of pregnancy are considered by the world at large so unequivocal, that none but very ignorant people can mistake them—and yet they are often mistaken, not only by women and their nurses, but by medical men of ample experience.

"For want of clear notions of the subject, and a very attainable degree of tact, practitioners are frequently incurring disgrace, patients are subjected to active courses of medicine for the reduction of tumours, for which the natural remedy is parturition; and in some instances, pregnant women have been supposed to be dropsical, and actually tapped, to say nothing of other blunders." 199.

* An Account of Some of the Principal Diseases peculiar to Women. 1829.

Our able author thinks he shall do an essential service to a numerous class of practitioners, by giving a full and connected account of the symptoms of pregnancy—the degree in which they may be relied on—the mode of discriminating pregnancy from cases resembling it—and the various forms of disease to which it requires to be applied. The order or succession of pregnancy symptoms must be carefully attended to, as well as the symptoms themselves.

The first symptom is the interruption of the menses. When the period passes, morning sickness usually occurs, and generally continues during the first half of pregnancy, subsiding about the time of quickening. When three months have elapsed without menstruation, the abdomen begins to enlarge—the patient rather *feeling* distended than *shewing* any visible increase of size. After the fourth month, however, some degree of protuberance can be perceived. By the fifth month, no one can fail to perceive it, when the female is standing—and, from this time, it gradually increases till it attains the full size. Thus the visible enlargement does not last more than five months. If it has lasted nine months, that alone is reason for doubting the existence of pregnancy.

The next symptoms in succession are enlargement and shooting pains in the breast—darkness of the areola—and swelling of the follicles around the nipples. The discoloration is very distinct in women who have dark hair and eyes—in those of a different complexion it is very equivocal.

The movements of the child. This is the most conclusive symptom, when it actually exists. These movements begin to be felt when four months have passed without menstruation. The sensation is, at first, very slight—like a pulse or fluttering in the abdomen, lasting only a few seconds. It may be felt once a day, and then cease for several—but gradually this sensation becomes stronger and more frequent, till at length if a hand happens to be laid on the abdomen at the moment when the child moves, it can be felt externally. Towards the end of pregnancy the movements are very strong, and the heavings of the abdomen may be seen through the dress.

If these symptoms always accompanied pregnancy, and never accompanied any other state, then we never could be in doubt; but, unfortunately, they may be absent in the impregnated, and present in the unimpregnated female.

In respect to *menstruation*, there can be no doubt that many women have a periodical discharge during pregnancy, so nearly resembling the ordinary secretion as not to be distinguished from it. The true nature of this discharge is not the object of inquiry here—it is sufficient to know that it exists.

Sickness varies so much in degree, kind, and duration, as to be quite fallacious. In thin women the *enlargement of the breasts* is often very slight—while in fat women the breast forms so small a proportion of the bosom that any enlargement of it is scarcely perceptible. In respect to the *areola*, it may be observed that, in very fair women, its discoloration is often so slight as to be with difficulty distinguished, while in brunettes, who have already borne children, the areola remains permanently dark.

"The enlargement of the abdomen from the third month to delivery is in all cases present and progressive whilst the fœtus is alive; but it may die, and yet be retained till the ninth month, in which case the enlargement will not be progressive. The same may be said of the movement of the fœtus; it will not move if not alive, and there are cases, though rare, in which it has not moved during the whole of pregnancy, although it has been born alive and vigorous; of this I have known one instance, and read of others. Thus a woman may be

pregnant though she seems to herself to menstruate, has no sickness, or enlargement about the breasts, or darkness of the areola, or progressive enlargement of the abdomen, or perceptible movement of the fœtus. Such a complete assemblage of omissions however is not likely to meet in the same case." 204.

The fact is, that a woman may have all the symptoms of pregnancy, and yet not be pregnant. Menstruation may stop from other causes—sickness may arise from other causes—the bosom may enlarge because the female is growing plump—the abdomen may enlarge from flatulence, dropsy, or other diseases.

"As to the movements of the child, it is very important to distinguish between these movements as felt internally by the patient, and as felt externally by a hand applied to the surface of the abdomen; the latter, if really felt, is an infallible sign of pregnancy, but the former are often felt when there is no child. Thus a woman may cease to menstruate, have sickness, enlargement of the bosom, and darkness of the areola, a progressive enlargement of the abdomen, and sensations which resemble those produced by the movements of the child, without being pregnant." 206.

If the ordinary symptoms of pregnancy then be so little infallible, what is to be the result in practice? How are we to act in doubtful cases? We must wait till the doubtful state is sufficiently advanced to enable us to ascertain whether enlargement of the abdomen depends on enlargement of the uterus —and if so, whether the uterus contains a fœtus. These are the objects of the "examination by touch," and the several other indications are important only as they elucidate these two questions.

It is difficult to decide by this process during the early months—therefore the longer the examination is delayed the more conclusive it will be. Dr. Hunter stated that he could not determine at four months—that he was distrustful of himself at five months—but that, "when six or seven months were over, he urged an examination." Having chosen the time for examination, the following are the rules laid down by our author.

"Our object is to ascertain the state of the uterus, and this may be felt in two ways, externally through the walls of the abdomen, and internally through the vagina. In examining externally through the walls of the abdomen, the bladder should be empty, the patient in bed, *in* her night dress, *on* her back, *in* a posture between sitting and lying, with the knees slightly drawn up. These are the most favourable circumstances for the external examination; but we are often obliged to examine without these advantages.

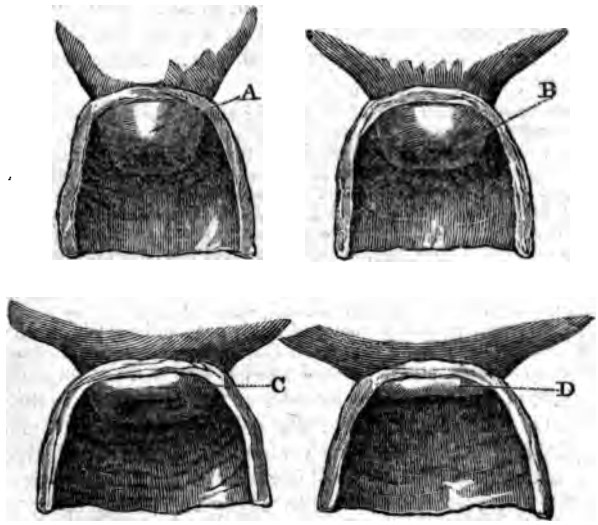
"The first thing to notice is the situation, consistence, and figure of the tumour which is distending the abdomen. In pregnancy the uterus does not rise out of the pelvis before the third month—by the sixth it is up to the umbilicus—by the seventh it is a little above the umbilicus—by the eighth month it is half way between the umbilicus and scrobiculus cordis and in the ninth month it has reached the scrobiculus cordis, its highest elevation; thus, if we are examining a patient about the sixth month of pregnancy we shall feel a circumscribed tumour occupying the front of the abdomen, from the brim of the pelvis to the umbilicus, of an oval form and firm consistency, much firmer than the abdomen above and on its sides, where it is occupied by the intestines. All this can be made out clearly if the walls of the abdomen are thin and relaxed; if they are fat, this is difficult, and often impossible; but even then we can notice whether the enlargement is firm or soft; the former will be the case if the patient is pregnant.

"The next thing to notice is the umbilicus. In the unimpregnated state it is sunk below the surface, forming a shallow pit; but in pregnancy, when the uterus has risen to or above the umbilicus, this part projects above the surface of the abdomen; this, however, depends on the period of pregnancy at which we are examining; it will scarcely be found before the sixth month, and the further the pregnancy is advanced the more distinct will it be. The

firmness of the abdomen and the projection of the umbilicus depend on one and the same cause, that is. the firmness of the tumour which is distending the abdomen; but any other tumour equally firm may occasion both these symptoms; their presence alone proves little, but if the state which we are investigating is advanced as far as the seventh or eighth month, their absence proves a great deal, for if the umbilicus is depressed, and the abdomen, though enlarged, is soft and yielding, these alone prove that the patient is not pregnant. Let not the practitioner, however, give an opinion till he has collected all the proofs." 210.

The movement of the child is the next thing to be attended to. If the hand be laid on the naked abdomen, the fœtus will sometimes be felt to stir—and if distinctly so, the symptom is the most conclusive of all.

"Having examined the uterus through the walls of the abdomen, we proceed next to examine it through the vagina; for this the patient should be turned on her side; and here again there are three things to observe, the state of its neck, the state of its body, and the movement, or rather the mobility of the fœtus. 1st, in the unimpregnated state the neck of the uterus projects into the vagina about two-thirds of an inch, like a thick, firm, fleshy nipple. At the termination of pregnancy, a few days before labour, this neck is completely obliterated, the portion of uterus, which lies over the top of the vagina, no longer projecting into its cavity but forming a flat roof. This obliteration begins about the fifth month, the neck becoming gradually softer, broader and shorter; by the seventh month it is much altered, and not at all like the neck in the unimpregnated state, being very soft, broad, and short. It is now calculated to have lost three-fourths of its length; but it is not quite obliterated till the last week of pregnancy, so that if a false alarm about labour, two or three weeks before delivery, gives the practitioner an opportunity of examining the uterus, he will find a soft short nipple still remaining." 213.



A the neck of the uterus before the fifth month, when it has undergone no change in its length.
B the neck at the sixth or seventh month, when it has begun to shorten.
C the neck in the eighth month, when it is nearly obliterated.
D the neck at the end of the ninth month, when it is quite obliterated.

The next thing is to ascertain whether the body of the uterus has been enlarged. This may be done by pressing up the finger between the neck of the uterus and the pubes, where, in the unimpregnated state, nothing will be felt but what is soft and yielding; but where pregnancy has advanced several months, this space is occupied by a large firm tumour. A practised hand finds no difficulty in detecting this difference—not so the inexperienced.

"There is a combination of the external and internal examinations, which in thin persons gives a very accurate knowledge of the nature of the tumour. For this purpose the finger of the right hand is to be applied against the tumour which is felt in the vagina, and the left hand is to be applied on the outside of the abdomen, to the upper part of the circumscribed swelling. Now by alternately pressing the tumour up, by means of the finger in the vagina, and down, by means of the hand on the abdomen. the practitioner becomes certain that the tumour which is felt through the walls of the abdomen, is the same as that which is felt through the vagina; the most satisfactory proof that it is an enlarged uterus. This method is applicable as early as the fourth or fifth month." 215.

As the fœtus floats in a bath of liquor amnii, its head rests over the top of the vagina, when the mother is in the erect position. If the practitioner applies his finger to the uterus just in front of the neck, and gives it a push, the fœtus will float for an instant, and the next instant fall with perceptible weight on the point of the finger. This sensation, if once felt, can never be forgotten. It is scarcely inferior to the muscular movements of the child—and has this advantage, that it can be felt whether the fœtus be dead or alive. The best period for this species of proof is between the fifth and seventh month.

There is a class of cases next touched on by Dr. Gooch, which consists in a torpid state of the uterus, with a flatulent state of the intestines. This is most liable to occur near the age of 50, when the uterus is about to discontinue its functions.

"At this time menstruation will often cease for several months, and the abdomen become distended with a flatulent tumour: the air moving about the bowels gives an inward sensation which is mistaken for the child; there is often slight nausea, various nervous feelings, and an anxiety to believe in pregnancy as a test of youthfulness. About this age, also, the omentum and parietes of the abdomen often grow very fat, forming what Dr. Baillie once called 'a double chin in the belly.' This assemblage of symptoms at this age frequently leads to the supposition of pregnancy, but I have met with many similar cases in young women. I have repeatedly known those who, on the return of their husbands after a long absence, have suddenly ceased to menstruate, and grown large about the belly, conclude that they were pregnant, and make preparations for their confinement. I have known the same happen to single women, who had been secretly incurring the risk of pregnancy; they were generally women of sickly constitutions, who were very subject to obstructed menstruation; and it is probable that in these cases the puzzling assemblage of symptoms was the result rather of mental agitation than of sexual intercourse." 226.

Several curious cases are here introduced by our author, in the way of illustration, and among others that of the celebrated Joanna Southcott, with all the laughable mistakes into which some sad, grave, and learned doctors fell on that occasion! But we shall not rake up the ashes of the dead, nor kindle up the angry passions of the living, by any farther reference to this ludicrous case.

Another class of cases liable to be confounded with pregnancy, are tumours of the ovary. The ovary, though smaller, in health, than the unimpregnated uterus, is often more enlarged in disease, forming, like the impregnated womb, a circumbscribed tumour, which rises out of the pelvis to various heights in the abdomen. These tumours are sometimes mistaken for

pregnancy—but hardly by a competent judge. The duration of the tumour, which is generally much beyond that of pregnancy, is alone a sufficient guide —though *one* circumstance should never be trusted to. The examination per vaginam settles the question. When a large ovary is mistaken for pregnancy, the error is comparatively harmless—but when pregnancy is mistaken for ovarian dropsy, and paracentesis is performed, the matter is serious. Dr. Gooch has heard of several such mistakes. But a woman with ovarian disease may become impregnated. Our author has seen several instances of this kind. The examination per vaginam is still the only safe mode of ascertaining the real state of the case.

But sometimes the cause which distends the abdomen is inside of the uterus, and not a fœtus—viz. air, water, hydatids. Dr. Gooch has never seen an instance of tympanitis uteri, neither has he ever met with one of dropsy of the uterus; but there are many on record. The one related by Dr. Thomson, in the Medico-Chirurgical Transactions, is a recent example. Of hydatids in the uterus Dr. Gooch has, of course met with many cases. The patients had the ordinary symptoms of pregnancy, only with some peculiarity which led them to doubt it—such as the absence of fœtal movements, the enlargement of the abdomen being disproportionate to the period of pregnancy, or, after advancing rapidly becoming suddenly stationary. In other cases, the patient, after supposing herself pregnant, had a discharge, sometimes of blood and sometimes of water, leading her to suppose that she was miscarrying. A short case may here be introduced.

"I was sent for to ———, a few miles from London, to see a lady, who having ceased to menstruate for one month, and becoming very sick, concluded that she was pregnant; the next month she had a slow hæmorrhage from the uterus, which had continued incessantly a month when I saw her; she kept nothing on her stomach. On examining the uterus through the vagina, its body felt considerably enlarged, and there was a round circumscribed tumour in front of the abdomen, reaching from the brim of the pelvis nearly to the umbilicus. I saw her several times at intervals of a fortnight, during which the hæmorrhage and the vomiting continued unrelieved; the peculiarity about the case was the bulk of the uterus, which was greater than it ought to be at this period of pregnancy, it felt also less firm than the pregnant uterus, more like a thick bladder full of fluid. Eleven weeks from the omission of menstruation she was seized with profuse hæmorrhage; towards evening there came on strong expelling pains, during which she discharged a vast quantity of something which puzzled her attendants. The next morning I found her quite well, her pain, hæmorrhage, and vomiting having ceased. I was then taken into her dressing-room and shown a large wash-hand basin full of what looked like myriads of little white currants floating in red currant juice; they were hydatids floating in bloody water." 244.

In the progress of these cases Dr. G. believes it impossible to come nearer to the truth than this:—that the abdomen owes its enlargement to a distended uterus, but what this organ contains is uncertain. The following case was, at first, supposed to be pregnancy—afterwards hydatids—and turned out to be neither one nor the other.

"A lady, the mother of a large family, having ceased to menstruate for several months, and growing large in the abdomen concluded that she was with child—at length there came on a profuse and perpetual discharge of water, sometimes mixed with blood, by which her strength was so alarmingly reduced, that first one and then another practitioner was consulted about her, and I met a consultation of four. Through the walls of the abdomen, the uterus could be felt, about as high as the umbilicus, and in the vagina the neck of the uterus was found obliterated, and its body enlarged. As every attempt to restrain the discharge and support her strength had been unavailing, and she daily became more exhausted, a silver tube was introduced through the orifice of the uterus into its cavity, that if it was distended by an ovum, the liquor amnii might be drawn off. The tube readily passed

in, but on withdrawing the wire no liquor amnii came away. A few hours afterwards she was seized with violent expulsive pains, under which she sunk rapidly and died. I was not present at the examination of the body; but the followi g statement was sent me by the gentleman who opened it. The uterus was as large as at the sixth month of pregnancy, and its cavity big enough to hold two fists: it contained neither fœtus nor hydatids, but a mass about the size of a goose's egg of stringy matter, like very soft placenta and unattached to the inner surface of the uterus; this surface was red and irregular, like a granulating sore; its walls were thickened as in pregnancy, of a dark red hue, and a flaccid texture." 247.

Dr. Baillie has alluded to something of this kind, in the following terms.

"It sometimes happens," says Dr. Baillie, "though not very often, that the uterus enlarges in size, and becomes much harder than in its natural state. This change corresponds very much to that of scirrhus in other parts of the body, and commonly extends over the whole of the uterus. I have seen it one case as large as the gravid uterus at the sixth month; ulceration, I believe, is commonly wanting." 247.

The last case in this section of our author's work we shall endeavour to abridge, though Dr. Gooch says he cannot abridge it. Let us try.

A farmer's wife, aged 45, married 20 years without children, had been jolted in a cart, three years previous to her application, after which profuse menstruation came on, and continued more or less ever since, inducing debility and emaciation. Eighteen months ago the abdomen began to enlarge—the enlargement increasing ever since, but latterly more rapidly. On examination of the sides, the space between the ribs and ilium felt soft and flatulent, the front of the abdomen being occupied by a circumscribed tumour of stony hardness. The umbilicus projected—the cervix uteri was broad, and short as in the seventh month. The space between the cervix and uterus was occupied by a very hard tumour. Here were all the symptoms of pregnancy, yet the woman was not pregnant. The result was not ascertained.

Our author has thus fulfilled the object of his paper, and observes that, if the young practitioner will make himself master of the detail, and acquire a little familiarity with the feel of the uterus in the pregnant and unpregnant states, the said detail will generally guide him right. Some have said that this art of distinguishing between the two states is a blind tact, gained only by practice, and incommunicable by instruction. To this our author does not agree.

"The period of my life when I improved most rapidly in the art of deciding by examination cases of doubtful pregnancy, was that in which I gained clear and orderly notions of the objects of examination. The faculty of observation requires rather to be guided, than to be sharpened; the finger soon gains the power of feeling, when the mind has acquired the knowledge of what to feel for." 249.

We too have fulfilled our object, and, in five or six pages of our Journal, have condensed the pith or marrow of 50 pages of goodly letter-press. We have taken a leaf out of Dr. Gooch's book—or at least a hint. It is this:—"provided you get the *points* of the work, the more briefly you do it the better:—if you are skilful at this, you will find that a page will hold a pamphlet—and 20 pages will often hold a bulky volume."—*Preface.* We are inclined to flatter ourselves that experience has conferred on us some *skill* in the art of condensing; but, in justice to Dr. Gooch, we aver that no degree of skill, not even that of RICHTER, whom he recommends as a model, could enable a writer to compress the matter of Dr. G's book into such spaces as he talks of in the above passage.

V.

ELEMENTS OF GENERAL ANATOMY, CONTAINING AN OUTLINE OF THE ORGANIZATION OF THE HUMAN BODY. By *R. D. Grainger*, Lecturer on Anatomy and Physiology. Pp. 526.

ALTHOUGH the study of minute anatomy has been cultivated with some assiduity since the days of Berenger and Vesalius, the progress made in its elucidation was comparatively trifling until the accurate dissections of Ruysch and Malpighi and the indefatigable investigations of Haller invested it with the size and dignity of a leading science. The ancient doctrine of four elementary constituents continued to be taught in the schools of medicine for many centuries after its original proposer had been removed; chemistry was studied under so many disadvantages that little could be expected from her discoveries; and anatomy was so much confined to the inspection of inferior animals, and so encompassed with silly theories, that the structure of the human body was but slowly developed. Even Haller himself, who was in talent and information at least a century before his age, was sadly trammelled with the fancy that there existed a rudimental fibre, into which every form of animal substance might be reduced; and, although this fibre was admitted to be invisible, "invisiblis ea fibra," he could not avoid hazarding many fanciful hypotheses as to its properties and composition. Cullen and the Hunters in this country, Bonn at Amsterdam, and Pinel, in France, built, with very considerable success, upon the foundation which had been laid; and two years after the *Nosographie Philosophique* of the last author made its appearance, Xavier Bichat presented the world with the first unique and consistent view of the general structure of the animal tissues. The arrangement laid down by this distinguished anatomist it is unnecessary to detail; suffice it to observe that in the subsequent classifications of Dupuytren, Richerand, Cloquet, Meckel, Mayer, and Beclard, it has been carefully consulted, and while greater facilities for anatomical research and more extensive inquiries have enabled some of his followers to improve upon his plan, the general ground-work of all their systems is essentially the same.

Although England has contributed her full share to the advancement of minute anatomy, nothing meriting the title of a system existed in this country before the appearance, in 1828, of Dr. Craigie's laborious and instructive work. To remedy this defect, Mr. Grainger has published the present volume, and although the "Elements of General and Pathological Anatomy" of the Scotch metropolis have been devoted to a majority of the same subjects, there is, notwithstanding, ample room for both, more especially when it is considered that rudimental structure is taught in Dr. Craigie's Elements with a reference to pathology, while physiology is the subject which the present author has had more immediately in view during his illustrations of animal texture.

The human body consists of solid and fluid matter, variously arranged and curiously modified in external character. These two forms of matter exert upon each other considerable influence. The solids are built up by the consolidation of the fluids, the fluids depend for the circulation and consistency

upon the action of the solids, and most of the fluids are elaborated by solid organs. Diseases of the one class are easily communicated to the other, and neither can continue in a state of health for any length of time without mutual participation.

"In studying the wonderful structure of our frame, we should observe the same method as in investigating the nature of any other material body: that is to say, we should endeavour to separate the fluid from the solid parts; we should examine these individually, in order to ascertain their properties, their differences, and their uses; in fact we should analyse, as far as this is possible, the animal body, so as to determine the nature of its constituent parts. This mode of procedure is well calculated to unravel the intricacy of the human organization; but in order to complete our knowledge of the disposition and operations of this complicated machine, it is necessary to reverse the method of examination; to trace, in a synthetic order, the various combinations of the fluid and solid materials; to study the properties and uses of the different organs; and, lastly, to compare the relations that exist between them, so that the share which each enjoys in the production of the vital phenomena, may be properly distinguished.

"The researches of animal chemistry to which anatomy and physiology are so deeply indebted, have shewn that the human body is composed of a great number of elementary substances, which are termed its ultimate principles. The exact number of these simple materials has not yet been determined, but the following are generally admitted:—

ELEMENTARY SUBSTANCES.

1. Azote.
2. Carbon.
3. Oxygen,
4. Hydrogen.
5. Phosphorus.
6. Calcium.
7. Sulphur.
8. Sodium.
9. Potassium.
10. Magnesium.
11. Iron.
12. Chlorin.
13. Manganese?
14. Silicium?
15. Fluorin?
16. Iodin?

"The combination of these elements in different forms and proportions, produces certain compounds which are called the immediate or proximate principles of formation. They vary considerably according to the age of the individual, the state of health, and other circumstances; so that it is very difficult to ascertain what number really belongs to the composition of the healthy body.

PROXIMATE PRINCIPLES.

1. Gelatin.
2. Albumen.
3. Fibrin.
4. Colouring Matter of the Blood.
5. Fattty Matter. { Olein. Stearin. Cholesterin.
6. Mucus,
7. Urea.
8. Picromel.
9. Sugar of Milk.

ACIDS.

1. Phosphoric.
2. Uric.
3. Carbonic.
4. Sulphuric.
5. Muriatic.
6. Benzoic.
7. Oxaliac.
8. Acetic.
9. Butyric?
10. Purpuric?
11. Malic?" 24.

The application of the microscope to minute anatomy is generally supposed to have been productive of much good; but the conflicting results which have issued from microscopical inquiries, equally celebrated for their

integrity and acuteness, cannot fail to cast an aspect of suspiciousness and uncertainty upon all their observations. Meckel reduces the ultimate animal constituents to two, one of which is globular and enters freely into the composition of many of the fluids; the other is susceptible of coagulation, and when coagulated forms all the solids, when liquid, the great body of the fluids. The globules are never seen alone, but always floating in the coagulable fluid. They vary in size, form, number and colour in different organs, at different ages, and in different individuals. In the blood they appear to consist of a solid centre, and a surrounding vesicle, which encloses, but is not attached to it. They are smaller in the liver than the spleen, in the nerves than the blood, and they are larger in the blood than in the lymph, milk, or chyle. They are numerous in muscle and nerve; absent from bone, cartilage and fibre; more numerous in the blood than in chyle, or milk, and their colour varies with the organ of which they constitue a part. Dr. Edwards, of Paris, asserts that the elementary structure of the cellular, fibrous, muscular, vascular and nervous tissues is globular, that the globules are spherical, each having a diameter of $\frac{1}{300}$ of a millimeter, and that they agree in form and size in whatever organ or animal they may be found; while Dr. Hodgkin disagrees with both Meckel and Edwards. He contends that Hewson, Home, Meckel, Banes, and Prevost have erred, in supposing that the elementary particles of the blood consist of a central globule, and an external vesicle. According to his observations they appear like *flattened cakes*, which are nearly or wholly colourless, have thick and rounded edges, and are depressed in the centre. He even denies *in toto* the existence of globules in the muscular, nervous, and cellular tissues—the very tissues which were referred to by others as more strikingly illustrative of globular structure, and he has discovered that the fibres of the muscular tissue are marked by transverse lines, which impart an appearance peculiar to themselves.

By these observations we mean not to cast discredit upon the information of the microscope; our object is merely to enter our *cavete* upon the records of minute philosophy, and to warn its advocates from obvious and prolific sources of disappointment. If elementary structure can be made more uniform, if the laws of organization can be shewn to be more simple, if it can be proved that animal texture is rudimentally the same wherever it occurs, then in the name of science, proceed in the cultivation of microcosmic knowledge. But the glaring discrepancies which have already marked the microscope tempt us to take a weighty percentage off the conclusions it announces, and the palpable tendency to deception which it is obnoxious to, make us look upon its employment with some misgiving and a degree of doubt. Young asserts that the size of the red particles of the blood $\frac{1}{6000}$ part of an inch, while Hodgkin makes it $\frac{1}{3000}$, or not half so large; Wollaston concludes it to be $\frac{1}{4000}$, while Banes makes it $\frac{1}{1700}$; and Turine estimates it at $\frac{1}{5240}$ at one measurement, and only $\frac{1}{1040}$ at another. Whether such inconsistencies arise from our attempting minutiæ for which we have no instruments, or whether they depend upon the deceptiveness of the instruments we have, are questions which it may perhaps in the present condition of the subject be more useful to propose than attempt to answer.

Following the example of Chaussier the author arranges the fluids of the

human body into four classes—1st, the fluids which form the blood, 2dly, the blood formed by these fluids, 3dly, the fluids formed by the blood, and 4thly, the fluids returned to the blood. This division may be seriously objected to by anatomists, who would base their arrangement upon structure, or by chemists who would erect it upon analysis, but to physiogists it must be especially appropriate, as it sacrifices every thing to accord with function; and being comprehensive enough to embrace every fluid, as well as distinctive enough to individualize them, the most important objects of an arrangement are attained. Of all the animal fluids by much the most important is the blood, whether its quantity, properties, or uses be considered. Harvey calculated that the blood constituted one-twentieth of the entire body, and Keil went so far as to estimate its quantity at 100 pounds. Its ordinary temperature, which is 98°, may be greatly altered by disease. In the cold fit of ague it has fallen to 94°, and in tetanus it has risen to 110°. About three minutes and a half after its removal from the body it begins to coagulate, and in seven its coagulation is generally complete. When the quantity drawn is small it coagulates sooner than when large, and arterial is slower in coagulating than venous blood. According to Mr. Thackrah the strength or tone of the system is in an inverse ratio to the time occupied by the coagulation of the blood. When coagulation is slow the strength is great; when quick it is feeble. Hence blood, which is drawn during active inflammation, will remain much longer fluid than healthy blood, or blood drawn from a debilitated habit; and for the same reason the first cup which is filled from a vein will coagulate more slowly than the last. These are observations of the most interesting nature both in a physiological and practical sense, and their intrinsic interest should be heightened by the fact that their accuracy cannot be the subject of dispute. It was John Hunter who first extricated the blood from the catalogue of dead fluids, and maintained that it was as largely endowed with life as nerve or muscle; and although the strong holds of prejudice for a time refused admission to such a doctrine, and although the natural abhorrence felt by every mind against important innovations earnestly wrestled with the arguments by which it came supported, every fresh investigation has only proved a fresh confirmation of its truth, and now there should not remain either difficulty or doubt upon the question. Compare the blood with any other fluid, (except the chyle, which is blood in its first stage,) oppose property to property, contrast phenomenon with phenomenon, and where are the common points, the generic similarities by which they are connected? If the blood be a lifeless fluid like the saliva, or bile, or urine, it ought to present the same properties and appearance in the cup as in the vein. Why does it continue fluid while connected with the system? Why does it coagulate when it leaves it? Why does its coagulability increase as vital power diminishes, and diminish as it increases? Why does it get sickly and diseased when the general system is disordered? Why does it deposit living muscle, living vessel, and living nerve, if it be itself lifeless; and why should its removal from the body lower life in proportion to the quantity removed? Will bile separate into its constituent parts when removed from the gall-bladder? Can it be killed with a stroke of lightning? Can it be inflamed like a piece of muscle? If a muscular fibre or nervous filament be separated from the centre of life they instantly die, speedily decompose.

and ultimately putrify; and if a few globules of blood be taken from an artery or vein they experience the same changes. Where then are the facts which shew that the blood is a lifeless fluid? If its dissimilarity to dead and its resemblance to living matter can be any vindication of its own vitality both are equally well established. Sir A. Cooper and Mr. Thackrah have maintained that the blood-vessels impart a vital influence to their contents, in virtue of which they continue fluid as long as they remain in contact with the vessels in a healthy state; and that the moment they are removed from the living tube they lose their fluidity and coagulate. But it is rather singular that two inquirers of such acumen could have overlooked one link in this chain of reasoning which is so weak as to incapacitate the whole. If the blood be preserved fluid by a living principle communicated to it by the vessel, it is absurd to suppose that it is itself dead; otherwise the nervous influence can imbue dead matter with living principle, while that same matter, to which the living principle is imparted, continues destitute of life! On this point Mr. Grainger observes with much judgment—"I think it will be admitted, that the blood must itself be endowed with life, in order that it may be capable of being affected by the nervous influence of its containing vessels; for it is self-evident, that no fluid deprived of vitality can receive any impression from simply being introduced into a living vessel." 45.

In the rude and shapeless embryo the solids bear a smaller proportion to the fluids than they do in the adult; and yet in the full grown body, where organization has reached its highest point, they do not seem to compose much more than one-sixth of the whole fabric. Chaussier desiccated a body weighing 120 pounds for several days, and at the end of the experiment its weight was reduced to 12 pounds; and an adult mummy was found to weigh only seven pounds and half.

"The ancients supposed that every solid organ might be reduced by a species of anatomical analysis, to a simple fibre which they called the elementary fibre. They said, that this was every where of the same nature, and that it was formed of earth, oil, and iron. They also imagined, that this fibre produced what we term the cellular tissue; and that this tissue, under different degrees of condensation, formed the various organs of the body. Haller, who admitted the existence of the elementary fibre, thought that it was not visible, and that it could only be distinguished by the mind; being to the anatomist, what the line is to the geometrician. This opinion is evidently erroneous, as matter must have existence. It is equally incorrect, at least in man and in the superior animals, to imagine that the cellular tissue forms the basis of all the solids. This tissue is, undoubtedly, the most extended element in the animal organization; but is not the only one. The best anatomists of the present day are agreed, that there are at least three, if not four, elementary fibres, viz. the cellular, the muscular, and the nervous. This division, which was suggested by Haller and adopted by Blumenbach, has been modified by Professor Chaussier, who contends, that there is a fourth fibre, which he calls the albugineous. Many distinguished authorities, in whose opinion I concur, believe this to be merely a condensed modification of the cellular fibre." 58.

These elementary tissues are not equally extensive, nor important. In many animals nothing but cellular texture is discoverable, and in some no nervous matter has as yet been found. Variously combined and proportioned the cellular, muscular, and nervous tissues give origin to a great variety of compound solids, and these solids are furnished with properties adapted to the places they occupy and the functions they discharge. Bichat

was the first who endeavoured to reduce into a digested system the different forms which organic solids assume, and the arrangement which he made, while it is in general too minute and in some parts deficient, has furnished subsequent and much less industrious writers with materials for new and more accurate divisions. To separate arteries from veins and exhalants from absorbents, to divide the nervous system into two departments to accord with his distinction of animal and organic life, to make the synovial tissue different from the serous, and the pilous from the epidermoid, was, certainly, making many differences out of few distinctions, and overcharging what might otherwise have been a simple catalogue. The following is Mr. Grainger's plan, which is not very different from that of Mayer.

"1. Cellular.
2. Serous.
3. Cutaneous. { Dermoid. / Mucous.
4. Vascular. { Arterial. / Venous. / Lymphatic. / Erectile.
5. Glandular.
6. Cartilaginous.
7. Fibrous. { Fibrous. / Fibro-cartilaginous.
8. Osseous
9. Muscular. { Voluntary. / Involuntary.
10. Nervous. { Cerebral. / Ganglionic.
11. Epidermoid.

"These different systems are united and combined together in order to form the organic apparatuses, which may be divided according to their functions, into three classes.

"I. The process of nutrition is accomplished by the following apparatuses:—
"*a.* The apparatus of digestion, consisting of the alimentary canal, extending from the mouth to the anus, with its numerous appendages, such as the teeth, the salivary glands, the liver, &c.
"*b.* The apparatus of respiration, comprising the lungs, with the organs which are subservient to their action, as the bones and muscles of the thorax, the wind-pipe, &c.
"*c.* The apparatus of circulation, comprehending the heart, the arteries, the veins, and the lymphatics.
"*d.* The apparatus of secretion, formed of the glands, the follicles, and the perspiring surfaces. Several of these organs also assist in other functions, and are comprised in their apparatuses, thus, the liver purifies the blood by the secretion of the bile, and at the same time, by that fluid, assists in the digestive process.

"II. The apparatuses of external relation comprehend:
"*a.* The apparatus of sensation, which includes the skin and the organs of the other senses.
"*b.* The apparatus of motion, formed of the bones, the ligaments, the muscles, and the synovial bursæ.
"*c.* The apparatus of the voice, consisting of the cartilages and muscles of the larynx, and also of the organs of speech.
"*d.* The apparatus of perception and volition, which is composed of the brain and nerves.

"III. The apparatus of reproduction consists of:
"*a.* The organs of generation in the male, including the testes and penis.
"*b.* The organs of generation in the female, comprising the uterus and the ovaria, and their appendages." 71.

The degrees by which these several tissues arrive at perfection are many and minute. When the ovum is examined upon the 8th day it appears to be composed of two membranes. The first or external membrane is open throughout its length; the second or internal one contains a slimy fluid

and two vesicles. At this period no globules can be detected, after some time they appear in trifling quantity, and at a more advanced stage they are seen to unite so as to form fibres. It was once believed that organization proceeded from the centre of an organ towards its circumference, but the reverse is now found to be the fact, and it is not less curious that at first every organ is double, and that the duplicates are afterwards united. The spinal cord and brain arise by two plates, and even the intestinal canal is not cylindrical until its two halves are united. The relics of this symmetrical arrangement are very obvious even in the adult. The raphe which divides the perineum, the mediastinum which separates the lungs, the fossa which marks the upper lip, the septum of the nostrils, and the falx between the hemispheres of the brain are evidently the remains of a grand longitudinal division; and the cleft palate, and the hare lip, and the divided perineum seem to depend for their formation upon this principle.

During every period of life the human body is changing its form, and varying its dimensions. At birth the head and nervous system, the heart and vascular system, preponderate very materially over the intestines, spleen, stomach and lungs; at puberty the organs of generation are developed; at maturity organization is perfect, and every function has reached its most finished state; and at old age the fluids become scanty, the solids unyielding, and function languid. These successive alterations in the organization of the body are accompanied with considerable changes in the energies of mind and in the condition of life. While the fluids are in excess during infantile growth impressions are easily made and dissipated, the mind is lively but uncertain, the passions are ardent but speedily cooled, the body is energetic but soon exhausted. Between puberty and manhood the mental powers are in their most vigorous exercise, every organ is firmly braced about with strength, and every function is punctually discharged; and as the body descends the vale of years imagination languishes, judgment becomes weak, memory faithless, and manhood sinks into a second childhood.

This statement, as a general one, is correct, but many brilliant exceptions are occurring daily—exceptions which ought to moderate the language of materialists. If organization be the cause and not the concomitant of life, the effect should in all instances be proportionate to the cause; mind should sink and rise with corporeal vigour; dilapidated constitutions should be as remarkable for pusillanimity as for weakness; healthy systems should be found in the Homers of the age, and the flame of genius should be seen sinking in company with the taper of life. But as an universal principle how far is the case otherwise? Our authors of the widest calibre are too often afflicted by disease, or harrassed by debility; some of the most brilliant effusions, which ever genius poured forth, issued from men who had far passed the zenith of life; how many hoary headed veterans of science in the present day could be enumerated, whose mental powers are standing firm during the wreck and ruin of every organ; and how many spirits, resisting the combined influence of sickness and of age, have at the close of a splendid career rather ceased to burn within fabrics, which had been rendered unfit for their occupation, than been buried amid their ruins!

The external characters of the body are materially influenced by the state of the sexual function; and any derangement in the construction, or

deficiency in the development of the genital apparatus is almost universally attended with some constitutional peculiarity.

"Castration will even, to a certain extent, produce in one sex the characters of the other; the ovaries were removed in a woman at Bartholomew's hospital; she afterwards grew thinner and more muscular; her breasts shrunk away, and she ceased to menstruate. The absence of the uterus only, does not prevent the individual from acquiring the general characters of the sex, nor does it destroy desire.

"The changes produced by the imperfection of the genital organs, is still more remarkable in some birds. It was noticed by Mr. Hunter, that the female bird sometimes acquires a plumage considerably resembling that of the male, and he supposed that this metamorphosis was connected with the age of the bird, and that it only occurred when she ceased to lay. Mr. Yarrell, who has presented a paper to the Royal Society, on the change of plumage which the hen-pheasant occasionally experiences, has found that it does not depend on age, but that it is connected with some disease or imperfection of the sexual organs. He further observes, that when these organs are imperfect in either male or female, the sexes approximate so much, that it is difficult to distinguish between them." 88.

We have now taken some notice of the principal points which the author has thought proper to comprehend within his introduction, and the reader can scarcely fail to be struck with their number and importance. Considering the nature of the present work, as well as the form of its title-page, we believe it would have been more beneficial to both had many of these preliminary observations been thrown into the body of the performance, and worked up into a distinct chapter. In an elementary work of this nature, one-fifth of the volume will, we have no doubt, be considered much more than enough for prefatory remarks, and when many, if not the most of these remarks are as strictly part and parcel of the general subject as are any of the topics discussed in the succeeding pages, it would have been not only more methodical, but in every sense more useful to have limited the introduction to the first seventeen pages, which alone are properly introductory, and to have opened the first chapter with the fourth section. Although we do not live in the days of the humoral pathology, and cannot discover as much disease and death in the animal fluids as our ancestors did, yet they should neither be wholly overlooked, nor hastily passed over. They are a most important department of the animal machine, they have laws and properties of their own which should be understood; they have a structure which ought to be unravelled, and they are not merely subject to disorder but frequently to disease. If, therefore, their natural properties and heathy anatomy be unknown, it is not less difficult to recognize derangement in them, when in an unhealthy state, than in a muscle or a membrane, if ignorant of its ordinary characters. Now, in the Elements of General Anatomy, the solids alone occupy the body of the work; the fluids are entirely neglected. In the introduction, it is true, the chemistry of the chyle, blood and lymph is given, something is said of their elementary composition, and a short table of the animal fluids generally is laid down; but few readers will think of looking into the introduction for matter which should hold a conspicuous place in the body of the book, and those who may be induced to do so in consequence of missing it elsewhere, will probably feel with us that it neither occupies its proper place nor receives the consideration it deserves. Influenced by this impression, we have devoted more

time to the introduction than we should otherwise have done, and in now proceeding to the *first chapter* we feel as though we were passing to the *second part.*

Cellular Tissue. Of all the tissues the cellular is the most important, because the most abundant in quantity and the most extended in situation. Haller first demonstrated that it was continuous over the body, that it was the connecting medium between different and distant organs, and that it entered largely into the composition of most of the solid viscera. Being of a very elastic nature it exists in great profusion around joints, to facilitate their movements; it is more abundant upon the anterior than posterior surface of the body, to enable a more extensive forward than backward motion, and it surrounds all the large viscera as the kidneys, pancreas and liver. Sometimes it is quite soft and loose, at others it is condensed into hardened fasciæ. It forms the mucous, serous and fibrous membranes; with the exception of the middle coat it forms arteries and veins; lymphatics and lacteals are composed of it; under the name of parenchyma it constitutes the greatest share of secreting and absorbing glands; it envelopes every nervous fibrilla and every muscular filament. According to Haller, the cellular tissue is composed of numerous laminæ, which, by crossing each other in every direction, form cells of various shapes and sizes. But this opinion was controverted by Borden, who maintains that it is an amorphous semi-solid, not unlike to animal jelly; and many of the most distinguished physiologists accord with this view. Meckel, more especially, is its strong abettor, and the fibrous texture together with the cellular appearance which this tissue certainly assumes under the microscope, depend, he asserts, upon its being stretched out into an unnatural state and upon the entrance of air within its cells while it is extended.

"From the examinations which I have made of the cellular membrane, both with the naked eye and with the aid of an excellent microscope, I am induced to believe, that it consists of an immense number of fibres which cross each other in every possible direction, and thus intercept very irregular spaces. I have not been able to detect any *linear arrangement* of globules, although rounded corpuscles may be seen at irregular distances, which are in some places clustered together, and in others dispersed in an isolated manner. It is difficult to determine whether these globules consist of solid matter, or merely of an animal fluid. When the cellular tissue is viewed through the microscope, nothing but fibres can be seen; so that it appears the layers, which are apparent to the naked eye, consist merely of fibres joined together.

"The cells, which have no determined form or size, communicate with each other. Among the many proofs which might be adduced in support of this position, the most decisive is the general diffusion of air and fluids when they have been extravasated. Thus in emphysema, the whole of the body has been seen enormously distended with the air which has escaped from the wound of the lung.* In a similar manner, butchers inflate animals, by making a puncture in some part where the tissue is lax, and from that one aperture the air is forced to the most distant parts of the body. In anasarca the fluid gravitates to the most depending situation; and in slighter affections, induced by general debility, any effu-

*"A very remarkable case of emphysema is related by Dr. W. Hunter, Med. Obs. and Inq. vol. ii. p. 17, *et seq.*"

sion which happens, is seen in the legs, especially about the ankles. Again, in rupture of the bladder or urethra, the urine is extravasated in the perineum, scrotum, penis, and even thighs. Those who deny the fibrous and cellular structure of this tissue, refer the above phenomena to the permeability which it possesses, owing to its soft consistence." 120.

Haller believed that the cellular fibre consisted of earthy particles connected by an intermediate cement, composed of oil and water; Boerhaave, Ruysch and Mascagni that it was a small vessel; but more modern inquiry has ascertained that it consists of albumen, jelly and animal mucus. Cellular tissue so resists putrefaction that it may be immersed for months under water without being decomposed. It is very cohesive, flexible and elastic; in a healthy state quite insensible, and, although painful when inflamed, it is not easy to determine whether the pain depends upon any newly-acquired sensibility, or over-distension of the nerves which traverse it.

Adipose Tissue. In addition to the cellular texture now described there is an adipose tissue, which only differs from it in function. It consists of small oval cells or vesicles, which are quite distinct from each other and from the common cells, which are not supposed to form the seat of dropsy, nor to be filled with air in emphysema. They vary in size from $\frac{1}{600}$ to $\frac{1}{800}$th part of an inch, and their principal use is as a reservoir for containing animal oil, from which nutriment may be derived when any thing occurs to obstruct or arrest the digestive function.

"This is strikingly illustrated in hibernating animals, which are very fat when they fall into the torpid state, but at the return of spring, they are much reduced in bulk. A very curious instance of life being supported by the absorption of the fluids of the body, occurred some years since at Dover. A hog weighing one hundred and sixty pounds, was buried under a portion of the cliff, which fell on its stye, for the long space of one hundred and sixty days. At the end of this time, being dug out, it weighed only forty pounds, and was extremely emaciated, clean, and white. As there was neither food nor water in the stye when the cliff fell, this hog must have existed during the time mentioned, by the removal of the adipose and other fluids from their containing structures, into the circulating system." 139.

Serous Tissue. The serous tissue forms membranes which have no communication with each other, and which with one exception always assume the shape of shut sacs,—*sacs sans ouverture.* These sacs are sometimes very simple, as in the bursæ mucosæ, which are merely large vesicles; but frequently they are more complex. When these membranes surround solid organs, as the heart, they are sacs so reflected upon themselves that the reflected portion covers the organ they enclose, so that when the organ is removed or the reflected portion detached a simple sac is obtained. These sacs cannot, therefore, be said to *contain* the organs which they cover, for they are attached to them by their exterior and not interior surface; and in strict langauge it cannot be said that the heart is within the pericardium, nor the lungs within the pleura, nor any of the abdominal viscera, within the peritoneal sac. Like the cellular tissue, the serus membranes are frequently met within those parts of the body which are subject to pressure, or motion. Thus bursæ mucosæ are found around the patella, olecranon, tendons, wrist, and finger-joints. A large bursa, or as it is more generally called capsula

synovialis, enters into every joint and is reflected over the articular cartilages, capsular and lateral ligaments. Drs. Gordon and Magendie have denied that the synovial capsule is continued over the articular cartilages, but Nesbitt, Hunter and Bichat agree in opposing this opinion, and the author has in his museum a preparation distinctly shewing a portion of this membrane with its vessels stretching over the articular cartilage of a fœtal calf. The serous tissue, whether it assume the form of splanchnic membrane, synovial capsule, or mucous bursa, is composed of condensed cellular tissue, as may be easily ascertained by maceration. Its blood-vessels in a healthy state circulate colourless fluid; its lymphatics are so numerous that Mascagni was induced to assert that it was exclusively made up of them; but, from its almost complete insensibility in a healthy state, the nerves which supply it must be few and small. It is highly elastic but not contractile, it secretes an albuminous fluid, which is called synovia when exhaled by the bursæ mucosæ and synovial capsules. So long as this fluid is in moderate quantity the object is obtained for which it was intended; but if, from excessive action on the part of the exhalants or of diminished action on that of the absorbents, it accumulates, the functions of the organs it surrounds are impeded, and disease is produced. It has been fashionable with some to ascribe dropsy to increased exhalation alone, and to regard as unchanged and unchangeable the absorbent function; but facts are hourly occurring to prove that the healthy balance, which should subsist between these two systems of vessels, may be disturbed by the derangement of either, and that we may have dropsy as surely and as severely from absorbent atony as exhalent activity.

Mucous and Cutaneous Tissues. Under the same system the author comprehends the mucous and cutaneous tissues, and although some of their physical characters may appear dissimilar, their composition and functions shew them to be the same. If the fœtus be examined while an early embryo,

"There is so little difference between the external and the internal integument, that they are distinguished from each other with difficulty. The perfect continuity of the skin at the external apertures of the body with the internal membranes, is another proof which supports the opinion of these structures being identical. At the lips, at the nostrils, at the eyelids, at the anus, at the meatus urinarius, at the labia pudendi, we see the skin gradually changed into the mucous membrane. It is true, that around some of these openings a slight line of demarcation exists, as at the tarsal edge of the eyelids and at the lips; and a similar appearance may be more evidently observed in some of the internal parts of the body, which are contiguous with each other but distinct in function; as for example, where the cuticular lining of the œsophagus joins with the villous tunic of the stomach, and, in a less degree, in the connexion between the inner membrane of the vagina and the vascular coat of the uterus. But these distinctions do not extend to the *structure* of the two divisions of the cutaneous system, and therefore it cannot, with any truth, be asserted, that one is not perfectly continuous with the other.

"The organization of the animals which are placed lowest in the scale, displays in a striking manner, the resemblance of the external and internal coverings of the body; in these creatures there are none of those diversities of appearance that have given rise to so much uncertainty in the human subject; the skin and the mucous membrane are, in fact, so completely identical, that one may, with impunity, be subsituted for the other; so

that if the polypus be turned inside-out, the new internal surface acquires the power of digestion, and the new external surface that of protecting the body. The effects of certain diseases, as for example, the prolapsus uteri and the prolapsus ani, occasionally shew that the mucous coat of the internal organs may become so altered by exposure to the air, as to assume in time some of the characters of skin." 175.

The skin is a complex organ consisting of, at least, three distinct laminæ, each of which is peculiar both in texture and office. The epidermis or external layer, Blumenbach says, can be again divided into several laminæ; Bichat has endeavoured to prove that it is perforated with pores which run in an oblique direction, and Chaussier supposes that the delicate filaments, which we see attached to its under surface after its separation from the cutis, are its exhalent and absorbent vessels. But Dr. Gordon regards these filaments as threads of pulpy matter formed by decomposition after death between the cuticle and skin; Chevalier has not been able, with the help of even the finest glasses, to detect any openings like distinct pores; and the author maintains that in its natural condition not the slightest appearance of laminæ is discoverable. It is the most extensive membrane of the body; not only covering its external surface, but entering by the natural apertures into the interior, and covering every part except the teeth which may be exposed to the external atmosphere, which induced Haller to observe that the teeth and the cuticle were the only organs which were allowed to come in contact with the air. It is deeply marked with linear depressions and corresponding elevations, which have a faint resemblance to the rugæ of some of the mucous membranes into which it is continued. These wrinkles are in part natural, to enable it to admit of more extended movements; partly, they are occasioned by the action of the subjacent muscles, and their size and number so increase with years that they are looked upon as a tolerably fair indication of either the age, or vigor of the constitution. Some have supposed that the cuticle is an inorganic substance, thrown out by the surface of the true skin; but when it is reflected that its reproductive power is greater than that of any other solid, that it is subject to disease, and that in scarlatina and other cutaneous affections it dies and exfoliates, we must conclude with the author that, like every other tissue of the human body, it is duly organized.

"The functions of the epidermis are so intimately connected with those of the skin in general, that only an imperfect account can be given of them in this place. Its most important use is to defend the body against the injurious influence of chemical and mechanical agents. It prevents the evaporation of the animal fluids in a very remarkable manner, so that a portion of dead skin, covered by the cuticle, may be exposed to the air for several weeks before it is dried; on the contrary, if the epidermis be removed, the cutis vera being deprived of its moisture soon becomes dry, hard, and discoloured. It moderates the impressions which are made on the nervous papillæ of the true skin, and guarding these delicate structures from the irritating contact of foreign bodies, it preserves that exquisite sensibility which is necessary for the proper exercise of the sense of touch. The complicated processes of cutaneous secretion and absorption are effected through the appropriate structure of the epidermis; and, lastly, the hairs, the nails, and the sebaceous glands, are all kept by it in their proper situations and offices." 198.

Between the epidermis and cutis Cruikshank succeeded in separating four

distinct membranes; Gaultier has found three, others only one, and Bichat, Chaussier, and Rudolphi deny the existence of any. The author believes that in the negro there is a distinct membrane between the cuticle and cutis, which is the seat of color; and, although in Europeans he has never been satisfied of the fact, he presumes upon its existence in consequence of the various shades of color which their skin presents. Corresponding to the five varieties of the human species there are five leading varieties in the color of their skins. In the Caucassian it is more or less white; in the Mongolian it is yellow; in the Ethiopian black; in the American copper-coloured; and in the Malayan it is tawney. In Albinos there is neither pigmentum nigrum in the eyes, nor colouring membrane beneath the cuticle. Their skins, eyes and hair are, therefore, white, and the organic differences on which these peculiarities depend, by being transferable from parent to child, become hereditary. It has been popularly believed that the rete mucosum can never be regenerated when once destroyed; but Gordon and Meckel maintain the contrary, and Mr. Grainger inclines to the same view. Although neither blood-vessels nor nerves have been detected in it, the same reasons, which favour the organization of the cuticle, may be employed to shew that it also is organized. The colouring matter it contains seems principally to consist of carbon, and may be partly destroyed by maceration in water, or in a solution of chlorine. A negro made his foot nearly white by immersing it for some time in water impregnated with chlorine gas.

"The rete mucosum is considered by Mr. Chevalier as a second or internal epidermis, which serves as a delicate intermedium between the insensible cuticle and the vascular and nervous substance of the true skin; thus preserving the sensibility of the latter, and securing the regular performance of its numerous functions. It is also connected with the regulation of the temperature of the body, for it is itself a bad conductor of heat, and being placed immediately under another bad conductor, and over a quick one, it must materially contribute to the uniformity of temperature, so necessary to an animal who is destined to inhabit all climates. The dark colour of the net work of Malpighi in the African, has been for a long time considered as a provision of nature for the defence of the skin against the powerful effects of a tropical sun. This opinion is rendered more probable by the experiments of Sir E. Home. This distinguished physiologist ascertained that by tightly binding a piece of *black* kerseymere around his arm, a temperature which burned off the nap of the cloth, produced no painful effect on the skin, although it was applied for fifteen minutes; on the contrary, when a piece of *white* kerseymere was similarly placed on the arm, a less degree of heat caused a blister in fifteen minutes. Sir Everard also found, that a temperature which excited pain and irritation in his own skin, produced none in the skin of a Negro.* We learn, however, from the observations of travellers, that the colour of the skin is not constantly in relation to the climate; but on the contrary, that there are dark races of people who inhabit the coldest regions, and light nations who live in the warmest climates; it is also known, that tribes entirely differing from each other in colour, inhabit the same latitude, and even the same islands.† Mr. C. Bell denies that the black skin preserves the Negro from the great heat of the African climate; he rests his opinion on the experiments of Priestley, which prove, that a dark body absorbs light and heat more rapidly than a white one, which repels them. But we should recollect that a high temperature irritates the skin,

* "Phil. Trans. for 1821, p. 1, *et seq.*"

† "Dr. Prichard, Phy. Hist. of Mankind, vol. i. pp. 457 489.

in consequence of acting on the surface of the cutis vera, and not on the rete mucosum, which is insensible. Now it is evident, that the latter, by absorbing the heat, prevents its action on the true skin; whilst in a white individual the heat passes through the semi-transparent epidermis and rete Malpighi, and thus acts immediately on the sensitive surface of the cutis. In support of Sir E. Home's theory, it may be mentioned, that Europeans who are exposed to the direct rays of the sun in hot countries, suffer severely from the irritation of the skin; at the same time that the dark inhabitants of these climates expose their naked bodies with perfect impunity."* 204.

The third and most essential lamina of the skin is the cutis vera, which, according to some is a muscular, according to others a fibro-cellular membrane. Its exterior surface, or *textus papillaris*, is covered with small elevations called papillæ, which are especially prominent upon the tongue. These papillæ are composed of nerves, blood-vessels, and lymphatics, are covered with rete Malpighianum and epidermis, to defend them from injury, and form the principal seat of the sense of touch. The interior surface is marked by depression or areolæ, which are perforated by many apertures, to transmit the hairs, nerves, and vessels of the skin. The reproductive power of the dermis is weaker than that of the epidermis, or rete mucosum; and when it is reproduced its supply of nerves and blood-vessels is diminished, its sensibility is decreased, and it never again discharges with the same effect the functions of the original skin.

The importance of the cutaneous tissue is, we believe, imperfectly understood; or, if understood, insufficiently attended to. After admitting it to be the special organ of sensation, it is looked upon by many as little more than a convenient envelope for defending more sensible organs from the stimulus of the air and other sources of excitement. But these uses, although the most obvious, are neither the only ones, nor the most important. The skin is both a respiratory and digestive organ. It inspires and expires as do the lungs, and precisely the same gases. The experiments of Cruikshank shew that carbonic acid is exhaled; and those of Abernethy that oxygen, if not azote, is inhaled. It has been long believed, though occasionally disputed, that it absorbs aqueous fluids; and there can be no doubt but that it secretes them. By placing frogs, toads and lizards in water it was ascertained by Edwards that their weight soon increased, and we have been ourselves the witness of experiments, which proved that a few minutes immersion either in cold or tepid water is followed by the same result in man. The importance of these facts is not yet sufficiently appreciated, partly because they are not universally admitted, and partly because when admitted they are not always seen in that practical aspect which to a careful observer they present. If the lungs, stomach and skin be organs of the same system conducting functions of the same character, sympathizing with each other's state, bound up in one common interest, is it not evident that diseases affecting any one of them should be treated with a reference to the system of which it forms a part, and that the health and vigor of the whole can be secured only by attending to their individual welfare?

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* "The above difference ought partly to be attributed to the much greater activity with which all the cutaneous functions are performed in the Negro."

The ultimate design of this community of office is obvious, but its immediate cause is obscure. Perhaps, in part it may be explained by the similarity of the tissues. The bronchial membrane of the lungs, the lining membrane of the stomach and intestines, and the external skin are essentially alike. They are all composed of cellular substance, they are all secreting and absorbing organs, they are all not only continuous, but convertible textures. The mucous system was arranged by Bichat into the gastro-pulmonary and genito-urinary divisions; but the ground-work of this division had been long before furnished by Bonn, who first demonstrated the continuity of the mucous membranes. The gastro-pulmonary division enters the body by the mouth and nostrils; the genito-urinary by the vulva in women and urethra in men. The nostrils and their appendages, the eustachian tube, cavity of the tympanum, and mastoid cells, the larynx, trachea and bronchi, pharynx, œsophagus, stomach and intestines are lined by the former; the urethra, vagina, uterus and its appendages, bladder, ureters and kidneys by the latter. When this lining membrane begins it is continuous with the external skin, when it ends it again becomes external integument; during part of its course through the interior of the body it is covered with a continuation of the external cuticle, and like the skin it varies in thickness according to the part it supplies, being finer in the sinuses of the head than in the bladder or intestines. In general the impressions of foreign bodies upon the mucous membrane are unperceived by the mind, but its natural sensibility is often augmented by disease, and where acute feeling is required, as in the lining membrane of the nose, it can exhibit great sensitiveness.

"In tracing the changes that occur in the vascular system, there are four principal points which it is desirable to determine: 1. The order according to which the different parts of this system first appear. 2. The arrangement which these parts observe at their primitive origin. 3. The relation which exists at different periods between the organs of the greater and lesser circulation. 4. The proportion between the number and capacity of the different orders of vessels in the several epochs of life.

"I. In attempting to ascertain what part of the vascular system is first developed, we are obliged to judge rather from the phenomena that occur in the process of incubation, than from any positive observations that have been made in man, or in the mammiferous animals. It may be stated, with tolerable certainty, that the veins of the *vesicula umbilicalis*, which in the human ovum corresponds with the membrane of the yolk, or *vitellary sack* of the incubated egg,* are the first which become apparent. The exact nature of the connexion that exists in the beginning, between the umbilical vesicle and the embryo, is rather obscure, but it is supposed that the cavity of the former communicates with the intestinal canal of the latter. It is evident that up to the second month the vesicle is connected by an artery and a vein, with the vessels of the mesentery; these communicating vessels are therefore called *vasa omphalo-mesenterica*.†

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* "The analogy of the vesicula umbilicalis with the tunica erythroides, which is seen in the ova of some mammalia, was originally observed by Blumenbach. This umbilical vesicle has been frequently, but incorrectly compared to the allantoid membrane of quadrupeds."

† "A conjecture has been offered by Meckel which, in part, is opposed to the above description. He thinks it is probable, from the examination of the vascular system in ace-

"2. The vessels of the incubated egg first appear under the form of minute vesicles, or rather of rounded spaces which are formed in the vitellary membrane, and which are filled with a viscid fluid. These spaces are at first isolated and distinct from each other; but gradually increasing in number, they constitute a very ramified vascular network, which soon contains real blood. The minute vessels of this plexus unite, and at length form the trunk of the omphalo-mesenteric vein. These vessels, in their origin, do not possess distinct parieties; they are, in fact, merely canals hollowed in the substance of the yolk-bag; but insensibly this membrane becomes thickened around the canals, and thus forms the rudiments of their walls, which are progressively, but slowly, perfected.

"3. The omphalo-mesenteric vein being thus formed, passes from below upwards, and terminates in a vein which, ascending perpendicularly, is dilated at the point where the heart is ultimately formed. The aorta arises from this dilatation, and, by its branches, distributes blood to the different organs; the corresponding veins, and also the omphalo-mesenteric artery, appear nearly at the same time. It is most probable, that the umbilical vessels are developed in the same order as the omphalo-mesenteric, which they seem to supplant; that is to say, the vein first and the arteries afterwards." 262.

Vascular Tissue. The omphalo-mesenteric vein communicates with the vena portæ, which is at this period of growth the main trunk of the venous system. At its upper extremity an enlargement is observed corresponding with the situation of the heart; the left ventricle is first formed, then the aorta, and afterwards the auricle. The left ventricle and auricle are at first separate, but subsequently approximate into two contiguous cavities; the auricle divides into two apartments, communicating with each other by the foramen ovale; the right ventricle, which at first had the form of a small tubercle, is prolonged to the apex of the heart, and for a time communicates with the left, and last of all the pulmonary artery appears like a distinct vessel.

The muscularity of arteries has been and still is a warmly disputed point, and, although many experiments have been made and many arguments advanced to maintain the affirmative of the question, it is certain that many physiologists of the present day are yet dissatisfied. Haller and Bichat assert that arteries exhibit no manifestation of contractility when irritated; that their fibres move not when dissected layer by layer, that their nerves may be galvanized without effect, and that opium is inert when administered to them. All these arguments have been repeated by Cragie in defence of the same sentiment, and Nystem, in his "new galvanic experiments," could discover no symptoms of contraction in the arteries of a living dog, as in the human aorta. On the contrary Hunter, Thompson, Hastings, Phillips and Verschuir maintain that arteries, especially those of a small bore, may be made to contract when touched with acids and ammonia, when excited by galvanism, when irritated by the scalpel, or when exposed to the air. Bikker and Van-den-Bas by means of electricity, and Vassalli-Eandi Ginlio and Rossi, with the galvanic pile, arrived at the same conclusion. The author advances no new facts to *lay* this agitated question, or reconcile these conflicting evidences; but he strengthens the number of those who advocate the muscularity of arteries, by adding his voice to theirs in favour of their contractile power.

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phalous monsters, and from the mode in which this system is formed in the animal kingdom. that the aorta is developed at the same time with the veins, or even before them."

It has been very generally believed that arteries are insensible, because when plied with irritating applications no pain was perceptible; but Mr. Grainger very properly observes—

"That several structures, which excite no sensation when touched, are yet exquisitely susceptible to the impression of their proper stimulants; thus the retina, which may be pricked with the cataract needle, without the consciousness of the individual, is capable of being vividly impressed by the rays of light.* I conclude then that the arteries, and particularly their internal coat, are endowed with a peculiar sensibility, which is fitted to receive the impression of the blood, and that this fluid acts as the appropriate stimulus to the contractility of the fibrous tunic. The importance of this property in a pathological point of view, is illustrated by the interesting experiments that have been lately performed by Mr. Morgan and Dr. Addison, concerning the influence of poisons on the animal economy. These gentlemen appear to have determined the long disputed question, as to the *modus operandi* of these deleterious agents, by ascertaining that the noxious effects of poisonous substances, introduced into the current of the circulation, *do not result from their direct application to the brain itself, but from the impression made upon the sensible structure of the blood-vessels, acting upon the brain, through the medium of the nervous system.*"† 280.

Osseous System. In the early embryo the bones consist of a viscid fluid, which is supposed by some to be mucilaginous, by others gelatinous. The consistence of this fluid gradually augments; after some time it assumes the character of cartilage, and ultimately of bone. According to Beclard ossification commences about a month after conception, while Meckel extends the period to eight weeks. The long bones appear before the flat bones, and the flat bones before the short ones. The ossific matter may be deposited in three ways;—in a soft and gelatinous state, in the substance of cartilage, or between membranes. The pre-existence of cartilage is not necessary for the deposition of osseous matter, as was once supposed, for in the diaphyses of the long bones and in the centre of the broad ones horny particles are deposited ere cartilage has been formed. Du Hamel seeing that bones and trees had some resemblance to each other in general form, conceived that they might grow in a similar way. He fancied that periosteum was to the former what bark was to the latter, and that in process of time the one was converted into bone as the other was into wood. This doctrine was controverted by Haller, who, running into an opposite extreme, maintained that the periosteum had no concern in the formation of bone; that it was fabricated by vessels internal to its surface. Both of these views seem to be too confined, for both the periosteum and medullary membrane are concerned in conducting the ossific process. The experiments of Troja, Breschet and Villermé are quite decisive that in many instances the inner layers of the periosteum are ossified; and Cruveilhier has observed that when the medullary

* "It is surprising how such an acute and admirable physiologist as Magendie, should have fallen into the error I have noticed above; such, however, is the fact, and in consequence of it, he is led into a contradiction concerning the retina: for, after stating that the central part of that membrane is more sensible than the rest of its extent, he goes on to assert that the sensibility of the retina may fairly be called in question. See Compend. of Phy. p. 47.

† "See Essay on the Operat. of Poisonous Agents upon the Living Body, p. 60."

membrane has been wholly destroyed, ossification proceeds at the surface of the bone, not only at the expense of the periosteum, but of the surrounding muscles. The same is shewn by the phenomenæ which occur during the re-union of a fracture. Blood is poured out by the lacerated vessels of the periosteum and neighbouring structure, and coagulates upon the broken ends of the bone. After a few days the red particles of the coagulum are absorbed, the periosteum swells and assumes by degrees the form of cartilage, osseous matter is now laid in this cartilaginous periosteum, as well as in the pale coagulum, and when the fractured parts are completely united the absorbents of the periosteum begin to act, the bony particles, which had been poured into it, are removed, and it ultimately returns to its ordinary texture.

Muscular Tissue. According to Prochaska muscular fibre, in whatever part of the body it be situated, or whatever length it may assume, does not exceed the $\frac{1}{10}\frac{1}{000}$ part of an inch in diameter; it appears to be more or less flattened, or angular; to be solid and diaphanous. Sir A. Carlisle conceives it to be a solid cylinder, enveloped in reticulated membrane, and containing a pulpy substance irregularly granulated. M. Bauer and Sir E. Home find it to be made up of globules of the same size with those of the blood when deprived of their colouring matter, or $\frac{1}{2000}$ part of an inch in diameter. Dumas, Edwards and Dutrochet agree with Bauer and Home in asserting its globular structure, and the view is now very generally admitted. But Dr. Hodgkin, Messrs. Lister and Cooper and the author cannot acquiesce with any of these doctrines. With a microscope, having a magnifying power of 300, Messrs. Cooper and Grainger uniformly found "that an immense number of minute transverse lines could be perceived crossing the fibres, which were in some parts divided from each other by longitudinal lines apparently marking the lateral boundaries of the fibres; in most places, however, the small transverse lines were not separated from each other by any distinct division. Several large fibres were also seen crossing the lines in different directions, which appeared to consist of cellular tissue." 424.

The actions of muscular fibre are voluntary, involuntary and mixed; but no muscle can contract unless excited by some mental, mechanical, or chemical stimulus. This contractile power continues until death,—according to Beclard from 1 to 24 hours after it, and ceases in different muscles at different periods. Nystem informs us that it is first extinguished in the left ventricle, next in the intestines and stomach, then in the urinary bladder, afterwards in the right ventricle, next in the œsophagus, then in the iris, afterwards in the voluntary muscles, and lastly in the right auricle. The involuntary muscles are distinguished from those under the guidance of the will by consisting of fibres, which are not parallel with each other, but which interlace and inosculate, and which, except the carnæ columnæ of the heart, do not possess any tendons. They are not remarkable for sensibility, since the heart has been touched while in full action almost without the consciousness of the individual. They are certainly not absolutely dependant upon the brain and nerves, since children have been born alive without either; yet from the influence which mental emotion and nervous irritation have upon their action, there can be no doubt but that, connected with their nervous system as they are, the involuntary muscles must be considerably under their control.

Nervous Tissue. According to M. Serres the ganglia of the great sympathetic are formed before the spinal cord, the nerves of the trunk and pelvis grow independent of the brain, the spinal cord appears next, finally the brain, and the medullary portion is formed before that which is cineritious. This last point is much disputed. Gall maintains that the gray matter is formed first; Tiedemann asserts the contrary, and others believe that these two substances are at first intermixed in the form of a reddish white matter, and that they gradually separate as organization is matured. About the fifth week after conception a membranous tube is observed in the spine, having at its upper end a rounded pouch or vesicle, in which may be perceived, with the aid of a powerful lens, the rudiments of the two lateral columns of the spinal cord, and of certain parts of the brain. At the fifth month the anterior and posterior roots of the spinal nerves are seen, the cerebellum is beginning to separate into a central part and lateral lobes; at the seventh month these lateral lobes are more fully developed, and convolutions appear upon the cerebral hemisphere; and at the eighth month the various parts of the encephalon and spinal cord have received their perfect form, and sustain no subsequent alteration in any respect but size.

If the results of Della Torre can be depended on, the nervous tissue consists of transparent globules, floating in a transparent but viscid fluid; which are smallest in the spinal cord, larger in the cerebellum, and largest in the brain. Prochaska denies that there is this difference in the size of these globules, or that they float in a fluid medium. He admits, however, that they do vary in magnitude, and that they are connected by a transparent cellular web. From a series of experiments performed by the two Wengels, they infer that the brain in mammiferous animals, birds, and fishes, consists of the same roundish bodies of which muscle, liver, spleen and kidney are composed, and that these bodies derive their shape from the cells of the cellular tissue. According to Sir E. Home and M. Baur nervous matter is composed of globules, which present a fibrous appearance by being connected into lines by an intervening elastic jelly. The diameter of these globules varies from $\frac{1}{24000}$ to $\frac{1}{40000}$ part of an inch, the average size being $\frac{1}{32000}$. In the gray matter they are from $\frac{1}{32000}$ to $\frac{1}{40000}$ part of an inch in diameter, the smaller globules predominating; while in the white matter the large globules prevail. In the mesolobe the small globules were in great number, in the brain and peduncles of the cerebellum the quantity of intervening jelly prevailed over the globules, and when the nervous matter was immersed in alcohol all globular structure disappeared and the elastic jelly coagulated. The experiments of Edwards have led him to the same conclusions, except that he considers these globules of the same size whether they be in the brain or nerves of all the four classes of vertebrated animals; while Dr. Hodgkin and Mr. Lister have unsuccessfully looked for globular structure in either the nerves or brain.

"The source of the mysterious power, which operates through the medium of the nervous system, is entirely unknown; we are even ignorant of the manner in which this power acts on the material organs, the brain and the nerves, that are essential to the manifestation of its phenomena. The deficiency in our information has not resulted from any want of inquiry, for this question has at all times commanded an intense interest amongst philosophers. I shall only notice in this place the most modern, and at the same time the most plausible of the numerous theories which have been invented to remove the difficulty.

"It has been supposed by many eminent physiologists, amongst whom it will suffice to mention Cuvier, Abernethy, and W. Philip, that the power by which the nerves transmit impressions to and from the brain, is analagous to, or even identical with electricity. This hypothesis is strongly supported by the fact, that when a nerve is perfectly divided, its action may be imitated by galvanic electricity; thus, after the section of the par vagum, the secreting power of the lungs and stomach can be supported by galvanism. The evolution of heat from the blood, can also be accomplished by the same power; and it is well known that muscular contraction is susceptible of being excited by the agency of galvanism. It is likewise worthy of remark, that when the par vagum is simply divided, the nervous power is still transmitted to the stomach; and even when the two ends are separated to the extent of a quarter of an inch, a part of the nervous power is conveyed from the upper to the lower portion of the nerve. These last mentioned phenomena are very similar to those produced by electricity; and tend, in a very forcible manner, to shew the identity of the nervous and Galvanic powers. But in establishing a doctrine of such importance, further evidence is required, and therefore it will be prudent, in the present state of the question, to defer forming any definite conclusion." 497.

The limits to which this review has been insensibly extended obliges us to bring it to a close; and the full analysis which has been given of Mr. Grainger's performance supercedes the necessity of adding any thing beyond a few general observations to what has been already written. In a work which is chiefly elementary much originality was not, perhaps to be expected; and few subjects could occur either for controversy or criticism. Desirous of filling his pages with important matter, points of mere fancy have been generally avoided by the author; yet, in travelling a region which has been so imperfectly surveyed, it was impossible always to walk along a path of known and acknowledged safety. Unfrequented bye-ways must occasionally be trodden on; unascertained districts must sometimes be passed over. In such cases nothing safer can be done than to avail ourselves of whatever aid preceding travellers have left behind them; and, although the merit of discriminating faithful description from fanciful delineation be not equal to originality, it is often more than difficult to discover the best guides where the pretensions of the candidates are equalled only by their number. In general anatomy much is yet to be done; many points are utterly unknown, and very many are obscurely conceived. Mr. Grainger has in a plain and intelligible style presented his reader with a majority of the leading points which could be prudently relied upon in this extensive subject, where difficulties occurred they are faithfully pointed out, where doubts might be raised they are frequently anticipated, and when his own experience can shed any light upon the subject he is engaged in it is brought forwards willingly, but with an obvious consciousness that in questions surrounded with much difficulty to decide positively were more like presumption than philosophy. In this country such an elementary manual was much required, for hitherto our students have generally been driven to the alternative of remaining comparatively ignorant of a most interesting department of their professional literature, or of having to search the systems of France and Germany for instruction which they ought to have found at home.

VI.

AN ACCOUNT OF THE MODE OF PERFORMING THE LATERAL OPERATION OF LITHOTOMY. By *Edward Stanley*, Assistant Surgeon, and Lecturer on Anatomy and Physiology at Saint Bartholomew's Hospital Royal 4to. bds. pp. 23. 7 plates. Longman's; London, 1829.

AMONG the many peculiarities and advantages of the present age of books and steam engines, we know of none that excite more pleasing reflections than the spectacle of men of eminence in the literary world and their respective professions engaged in the compilation of works for the instruction of youth. Who is not delighted at seeing the amiable and illustrious host of Abbotsford, the high minded Sir Walter Scott, lay his border-harp and minstrelsy aside, forget the knightly deeds of Cœur-de-Lion, or the trials of Jeanie Deans, and employ himself in writing Tales for his Grandchildren? Who amongst our readers that have seen the volumes of the FAMILY LIBRARY do not envy the young circles for whom it is executed by such men as Lockhart, Allan Cunningham, and Milman? Amongst ourselves the same gratifying prospect is daily presented to our view, and the veriest cynic, or most callous man of the world must surely experience some of the kindlier feelings of human nature, when such men as Sir Astley Cooper and Abernethy are engaged in the task of publishing their Lectures for the benefit of the students of that profession, over which they have themselves thrown so bright a gleam of honour. We were led into this train of thoughts from perusing the Essay of Mr. Stanley, the title of which we have copied. The object of the author is so well explained in his short and modest preface, that we cannot refrain from transcribing it entire.

"Respecting the operation of Lithotomy, Mr. Cheselden observes, "if I have any reputation in this way, I have earned it dearly; for no one ever endured more anxiety and sickness before an operation; yet, from the time I began to operate, all uneasiness ceased; and if I have had better succes than some others, I do not impute it to more knowledge, but to the happiness of a mind that was never ruffled or disconcerted, and a hand that never trembled during any operation.'

"If these were the feelings of Mr. Cheselden, with his knowledge and experience, at each repetition of the operation for the stone, we are not to be surprised at the anxiety which most individuals endure the first time they perform it. In endeavouring to be serviceable on such an occasion, I have experienced the want of a simple, yet sufficiently detailed account of the mode of performing the operation, unencumbered by critical or historical matter. Such an account it has been my object to supply, and with the hope of having increased its utility, I have added some illustrations of the parts concerned in the operation, in their healthy and diseased states."—*Preface.*

Of course such a work, though commendable alike for the spirit in which it is conceived and the manner in which it is executed, is not altogether adapted for analysis in this Journal, as our object has always been to make these pages rather worthy the study of the old and established practitioner, than the mere perusal or amusement of the student. Nevertheless we shall

give the more important points connected with the operation of lithotomy, in order to benefit such of our young friends as may not have the means or the opportunity of consulting the work of Mr. Stanley.

I. OF THE MODE OF PERFORMING THE OPERATION.

Our author lays down very excellent rules on this subject, rules which perhaps may be read with advantage by older surgeons than those for whose use the work is professedly designed. Mr. Stanley recommends that warm water should be freely injected into the rectum three hours before the operation, and that the bladder should contain some urine at the time of its performance, although it is well known that Cheselden entertained a contrary opinion. The bandages should be applied before the staff is introduced, in order that the position of the latter should not be altered; the staff itself should neither be pressed upwards, downwards, nor to one side, but held firmly, perpendicularly, and without any change of position; the assistant holding the staff generally stands upon the patient's right side, but by standing on the opposite, he has the advantage of holding the instrument in his right hand; two other assistants at the sides of the patient should grasp his knees and feet, and another still should be placed at his shoulders; the pelvis being brought to the table's edge the anterior superior spines of the ilia should be maintained throughout in a horizontal line; before making the incisions the operator should ascertain the situation of the tuberosity and ramus of the left ischium, and then recollecting that the corpus spongiosum is directly behind the raphé of the perineum, he should mark with precision the triangular space between the corpus spongiosum and crus penis, through which the incisions are to be directed to the membranous portion of the urethra.

"The first incision is to be commenced an inch and a quarter above the anus, and a little more than a quarter of an inch to the left of the raphé, and is to be continued obliquely, outwards and downwards, to the extent of about three inches, towards the tuberosity of the ischium. The thumb and fore-finger placed against the perineum will mark the points where the incision should begin and terminate.*

"The first incision should be through the skin, subjacent fat, and tendinous fibres. Its length should never be much less than three inches, and in the case of an unusually large stone, it must be extended towards the tuber ischii even to four inches. Its exact line should be one third from the tuberosity and ramus of the ischium, and two thirds from the anus. Any deviation from this had better be by an approximation of the incision to the tuberosity, than to the anus.

"In a thin person, a scalpel may be plunged through the integuments directly into the membranous portion of the urethra; but, with a considerable depth of fat in the perineum, this is difficult, and in attempting it the bulb will be almost certainly divided, its artery wounded, and the urethra penetrated anterior to its membranous portion.

"With the left fore-finger in the wound, the incisions are to be continued to the membranous portion of the urethra. These incisions, being made in the triangular space between the corpus spongiosum and the crus penis, will divide the transversalis perinei muscle, branches of the perineal artery, a small part of the triangular ligament, and the front edge of the levator ani muscle.

* "It is necessary to observe, that this, with the other directions for the operation, is designed for the adult."

"The left fore-finger and the scalpel moving together towards the membranous portion of the urethra, and the staff being felt, with the edge of the scalpel turned upwards, a slit in the urethra is then to be made, to the extent of half an inch at least.* The nail of the fore-finger passing by the side of the scalpel into the groove of the staff, is to remain there as a guide to the beak of the knife or gorget, whichever instrument may be used to complete the operation.

"That there may be a certainty of opening the urethra in its membranous portion, let it be recollected, that the scalpel must enter the staff directly under the symphysis pubis: of the importance of this rule there can be no doubt. Mr. Blizard,—the dexterity of whose numerous operations at the London Hospital has been acknowledged in the strongest terms by all who witnessed them,—attributes his success to the rule of invariably penetrating the urethra in its membranous portion. Mr. Martineau, who has recorded the result of his great experience, states: 'I introduce the point of the knife into it (the groove) as low down as I can, and cut the membranous part of the urethra.'† The nearer to the prostate gland the urethra is opened the better, as it lessens the risk of wounding the bulb or its artery.

"As soon as the urethra is opened, urine may flow from the wound; this must be recollected; otherwise it might be supposed the bladder had been opened when the incisions have not reached the prostate.

"The knife being conducted along the left fore-finger to the staff, its beak is to be moved a little within the groove, to ascertain that the two instruments are in contact. The staff, then taken in the left hand, is to be held firmly and without any change of its position, while, with the right, the knife is urged slowly onwards to the bladder. Its entrance into the bladder will be indicated by the sudden removal of resistance to its progress, and, probably, by a gush of urine. The incision of the prostate is yet to be adequately enlarged in withdrawing the knife from the bladder, and at the same time directing its blade outwards and downwards. This incision through the left side of the prostate will correspond with the incision of the outward parts, and it should be of sufficient extent to permit the easy passage of the finger into the bladder.

"The knife should be held lightly as it is withdrawn from the bladder, that the operator, sensible of the resistance it meets, may judge accurately of its progress through the prostate. In withdrawing the knife, attention should be given to the position of its handle, which may be inclined towards the left ischium, but not towards the right, as the blade would then be directed towards the pudendal artery." 8.

The gorget is to be conducted into the bladder in the same manner as the knife but its width renders any division of the prostate on its *withdrawal* unnecessary. The scalpel used for the first incisions has been used by some operators to divide the prostate, but Mr. Stanley doubts whether even the steadiest hand will conduct it along the groove of the staff with the same precision as an instrument to the end of which a beak is appended. Some surgeons whilst cutting into the bladder depress the handle of the staff in order that by the elevation of its other extremity any risk of injuring the lower part of the bladder may be avoided; for this positon of the staff a cor-

* "It is here presumed, that a single-edged scalpel has been used for the first and subsequent incisions. Then, to secure a free incision of the urethra, the edge of the scalpel must be turned upwards; but with a double-edged scalpel this movement would be unnecessary.

† "Med. Chir. Trans. vol. xi."

responding depression of the handle of the knife or gorget will be required to secure the continued adaptation of the two instruments. The staff may be left in the hands of the assistant until the incision of the prostate is completed, by which means the operator can pass his left fore-finger along the side of the knife whilst dividing the prostate, and ascertain if this incision of the gland is sufficient. Mr. Stanley, however recommends the operator to take the staff himself, as is generally done, and we think there can be no doubt of the general propriety of the advice.

"The knife or the gorget having been withdrawn, the staff is to be taken in the right hand, and the left fore-finger passed along it into the bladder. The staff is then to be withdrawn, and is to be ascertained by the finger to what part of the bladder the forceps should be directed, that they may immediately touch the stone. On withdrawing the finger, the forceps, with their blades closed, are to be passed slowly through the wound, and inclined upwards as they approach the bladder, carefully observing when they enter its cavity.

"Upon the foregoing plan, the staff will be the conductor of the finger into the bladder, and the finger the conductor of the forceps. The introduction of the finger is useful to ascertain the situation of the stone, and, by separating the sides of the incision in the prostate, to facilitate the passage of the forceps. By allowing the staff to remain in the bladder until the finger has entered its cavity, the beaked or probe-pointed knife can be readily conducted to the bladder, for the purpose of enlarging the incision of the prostate, should this have been inadequately made; and if, from an unusual firmness of the prostate, the sides of the incision through it do not readily yield, much difficulty may be experienced in discovering the passage to the bladder, when the staff has been withdrawn, and its aid, as a conductor of the finger, is thereby lost. So many sources of difficulty are avoided by a strict adherence to the rule of not withdrawing the staff until the finger has fairly entered the bladder, that it cannot be pressed too strongly upon the attention of the operator.

"When the blades of the forceps happen to be passed to the upper or to the under surface of the stone, it may be seized directly they are opened. But when the forceps touch the stone only on its anterior surface, it is necessary, in opening the blades, to advance them a little, otherwise, in separating, they will recede from the stone.

"When the first attempt to seize the stone has failed, the forceps should be directly withdrawn, and the finger introduced into the bladder, to change the situation and position of the stone. But the finger may not reach the stone; a scoop or other instrument must then be introduced, to dislodge the stone from its unfavorable situation, and it is scarcely necessary to mention the importance of introducing into the bladder but few instruments, and these as gently as possible. A stone lodged in the lower part of the bladder has in some instances been raised, and its position changed, by the finger introduced into the rectum." 12.

But, as Mr. Stanley, justly remarks, rules will avail little to meet the various difficulties which may arise in the progress of this dark operation, and much must depend after all on the tact and dexterity of the operator. The forcible contraction of the bladder on the stone may resist its seizure :—or the stone may be partially encysted or lodged within the orifice of the ureter: —or it may adhere in some degree to the mucous membrane of the bladder:—or there may be an hour-glass contraction of that organ. In most of these cases the peculiarity is discovered during the operation, and some may be generally suspected from the occurrence of any unusual circumstance in sounding the patient.

"Whether the operation has been completed by a knife or by a gorget, some resistance to the progress of the stone through the wound may be expected. This resistance may be in the prostate or in the external parts; but in either case, it will yield to the skilful use of the forceps, provided that the incisions have been properly made, that the stone is not unusually large, and that the prostate has undergone no change in its structure.

"The skilful management of the forceps consists in pressing their blades gently against the sides of the wound, first in one direction, then in another, but especially downwards,* and in drawing them outwards slowly, that time may be allowed for the yielding of the surrounding parts. Laceration, or severe contusion, of the sides of the wound will probably be followed by suppuration, which, by spreading extensively through the surrounding cellular tissue, may be destructive of life. With these circumstances in his mind, the operator must judge to what extent the effort to extract the stone may be safely persevered in, and when he ought to desist, for the purpose of enlarging the wound with the knife in the situation where there is the most resistance.

"When the resistance to the progress of the stone is in the prostate, although the left side of the gland has been divided to the usual extent, it will be better to cut into its right side than to extend the incision of the left at the risk of wounding the pudendal artery, or of cutting the coats of the bladder beyond its neck.†

"When the resistance to the progress of the stone is in the external parts, the incision of these must be enlarged towards the tuberosity of the left ischium.

"The extraction of the stone must be directly followed by the introduction of the finger into the bladder, for the purpose of examining every part of its internal surface; and this must be carefully done, as there may be a second stone not readily discoverable in consequence of its being lodged in a recess of the bladder at its fundus or elsewhere.

"And it is necessary to examine the surface of the stone. A particle of it may have been chipped off, and retained either in the tract of the wound or in the bladder. Unless it can be discovered in the wound, and thence dislodged by the end of the finger, a stream of warm water must be directed with a good syringe through the wound to the cavity of the bladder, to detach the particle of stone which may be sticking to its mucous membrane." 15.

II. OF THE INCISION OF THE PROSTATE.

The incision of the prostate is the most debateable part of this debateable operation, and we believe that upon it depends the chief risk of failure or chance of success. As, however, the object of the present article is to explain the ordinary and, cæteris paribus, the best method of performing lithotomy, we shall not enter into the litigated questions respecting the extent of the prostatic incision. Mr. Stanley observes that it can scarcely be doubted that the best direction, is the division of its left lobe obliquely outwards and downwards, and that an incision in the prostate cannot be made in any other direction with so little risk of injury to the pudendal artery or to

* "This will be towards the wider part of the space between the rami of the ischia.

† "The thin coats of the bladder can scarcely resist the extraction of the stone, and from the incision of the bladder beyond its neck, there will be the danger of infiltration of urine into the pelvis, and of injury to the ureter, so close to the neck of the bladder is its termination in some subjects."

the rectum. An incision capable of easily admitting the finger into the bladder is generally sufficient, and if the stone is unusually large, Mr. Stanley well observes that it is better to determine on the incision of both sides of the prostate, than prolong too far the incision on the left side. By this means an increase of space will be obtained, to be measured not merely by the increased extent of the incision, but by the greater facility with which the neck of the bladder will then yield to the pressure of the forceps. If the stone be still too large to be safely extracted it should be broken either by a pair of strong forceps with much projecting teeth, or the instrument contrived by Mr. Earle, and described in the 11th Vol. of the Medico-Chirurgical Transactions.

"An exclusive preference is not to be given to the gorget or to the knife for the incision of the prostate. With either instrument, skilfully used, the operation may be well done. With a gorget, properly constructed, there is no risk of wounding the pudendal artery or the rectum, because the limits of the incision are determined by the dimension and form of the instrument. With a knife, in an inexperienced hand, there is not so much certainty of confining the incision within its proper limits.

"A comparison of the gorget with the knife, so far instituted, is favourable to the former; but to the narrow-bladed and beaked knife, first used by Mr. Blizard, an advantage belongs, which a gorget, from the width of its blade, cannot possess. The knife enters the bladder, as Mr. Blizard was accustomed to remark, as easily as a probe. The gorget, on the other hand, must meet resistance in passing through the prostate. Very much less, however, will this resistance be than it has been usually represented when the gorget has been properly made, and it is guided with skill.

"For the young subject, or for a thin adult, the knife is especially suited. It is also to be preferred for any case in which the bladder is closely contracted upon the stone. But for a very fat, or for an old subject, in whom, by the enlargement of the prostate, or the dilatation of the rectum, the bladder is raised much above its natural situation, the gorget is better adapted, on account of the great distance from the perineum at which the prostate and neck of the bladder are, in such instances, situated.

"Other methods of dividing the prostate, and other instruments for doing it, have been recommended: doubtless, some of these are good; but, for the mention of them here, consistently with my present object, it would be necessary for them to be better than those which have been described, and I have not been able to satisfy myself that they are so." 19.

The third section contains some very judicious remarks upon the sound, staff, gorget, and beaked knife, remarks which we would recommend to the attention of the young surgeon. His success will be found to depend much more on these minutiæ than a person at first would imagine, and often have we seen an able and dexterous operator embarrassed by an ill-adapted beak and groove. We must now close our notice of this highly meritorious and modest production. The extent of our analysis shews the esteem in which we hold it, and we trust we may say without suspicion of adulation, that the present *brochure* of Mr. Stanley does no discredit to the author of the "Manual of Anatomy." We strongly recommend those students who are engaged in the operations on the dead body, to peruse these instructions before they pass to the performance of lithotomy."

VII.

OF SOME SYMPTOMS IN CHILDREN ERRONEOUSLY ATTRIBUTED TO CONGESTION OF THE BRAIN. By *Robert Gooch*, M. D.

THE above is the title of the sixth chapter of Dr. Gooch's recent publication, and the subject is of very great importance. The chapter opens in a ludicrous manner, considering the gravity of the subject; but the moral inculcated deserves to be remembered.

"I remember when a boy reading a story of two knights-errant who arrived on the opposite sides of a pedestal surmounted by a shield; one declared it was gold, the other that it was silver; growing angry, they proceeded to blows, and after a long fight each was thrown on the opposite side of the shield to that where he began the fight—when both immediately detected their error: the knight who had said it was silver finding that on the opposite side it was gold, and the knight who had said it was gold finding that on the opposite side it was silver. This story, a little modified, is a good illustration of the state of medical opinion in this age, perhaps in all ages; medical men have no occasion to tilt, for they all throng on one and the same side of the shield; they look only at the golden side, and never dream of the possibility that on the opposite side it may be of a different metal." 355.

Dr. G. properly remarks that two sets of symptoms are distinguishable in cases of disease, and require to be discriminated. One set of symptoms forms what may be called the physiognomy of the complaint—the other indicates the morbid state of organization on which the disease depends.

"Two patients complain occasionally of dimness of sight, swimming of the head, singing in the ears, and observe that if they turn the head on one side to look at an object they feel as if they should fall; but the one is plump, florid, and has a full pulse; the other is pale and thin, has cold hands and feet, and a pulse small and feeble. One practitioner bleeds them both; the other bleeds the one, but does all he can to give blood to the other. The latter cures both his patients; the former cures the one but ruins the health of the other; but such is the nature of the human mind that the cases *for* a preconceived opinion are retained easier than those *against* it. He remembers his good deed, forgets the other, or calls the case 'anomalous,' and marches on, without the slightest doubt that bleeding is the universal and sovereign remedy for dimness of sight, swimming of the head, and singing in the ears, save and except only in 'anomalous' cases." 357.

Dr. G. is anxious to call the attention of medical men to a disorder of children which he finds invariably attributed to, and treated as, CONGESTION or INFLAMMATION of the brain; but which he is convinced often depends on, or is connected with, an opposite condition of the circulation. It is chiefly indicated by heaviness of head and drowsiness. The age of the little patients is generally from a few months to two years or three. They have, in our author's experience, been rather small of their age, in delicate health, and exposed to debilitating causes.

"The physician finds the child lying on its nurse's lap, unable or unwilling to raise its head, half asleep, one moment opening its eyes, and the next closing them again with a remarkable expression of languor. The tongue is slightly white, the skin is not hot, at

times the nurse remarks that it is colder than natural; in some cases there is at times a slight and transient flush; the bowels I have always seen already disturbed by purgatives, so that I can scarcely say what they are when left to themselves; thus the state which I am describing is marked by heaviness of the head and drowsiness, without any signs of pain, great languor, and a total absence of all active febrile symptoms. The cases which I have seen have been invariably attributed to congestion of the brain, and the remedies employed have been leeches and cold lotions to the head, and purgatives, especially calomel. Under this treatment they have gradually become worse, the languor has increased, the deficiency of heat has become greater and more permanent, the pulse quicker and weaker, and at the end of a few days or a week, or sometimes longer, the little patients have died with symptoms apparently of exhaustion. In two cases, however, I have seen, during the last few hours, symptoms of oppressed brain, as coma, stertorous breathing, and dilated and motionless pupil." 358.

Dr. Gooch relates an instructive case illustrative of the above remarks, where leeches were applied to a child two years old, and the result was fatal. This case and some incidental remarks are so interesting that we shall here insert them.

"A little girl about two years old, small of her age and very delicate, was taken ill with the symptoms which I have above described. She lay dozing, languid, with a cool skin, and a pulse rather weak, but not much quicker than natural. She had no disposition to take nourishment. Her sister having died only a week before of an illness which began exactly in the same way, and which was treated by leeches and purgatives; and some doubts having been entertained by the medical attendant of the propriety of the treatment, leeches were withheld, but the child not being better at the end of two days, the parents, naturally anxious about their only surviving child, consulted another practitioner. The case was immediately decided to be one of cerebral congestion, and three leeches were ordered to be applied to the head. As the nurse was going to apply them, and during the absence of the medical attendants, a friend called in who had been educated for physic, but had never practised it, and who had great influence with the family: he saw the child, said that the doctors were not sufficiently active, and advised the number of leeches to be doubled. Six, therefore, were applied; they bled copiously; but when the medical attendants assembled in the evening they found the aspect of the case totally altered, and that for the worse: the child was deadly pale, it had scarcely any pulse, its skin was cold, the pupils were dilated and motionless when light was allowed to fall on them, and when a watch was held to its eyes it seemed not to see; there was no squinting. Did this state of vision depend on the pressure of a fluid effused into the brain since the bleeding, and during this exhausted and feeble state of circulation or did it depend on the circulation of the brain being too languid to support the sensibility of the retina? It is well known that large losses of blood enfeeble vision. I saw a striking instance of this in a lady who flooded to death. When I entered the chamber she had no pulse, and she was tossing about in that restless state which is so fatal a sign in these terrific cases. She could still speak, asked whether I was come, (she knew I had been sent for,) and said 'am I in any danger?—How dark the room is!—I can't see.' The shutters were open, the blind up, and the light from the window facing the bed fell strong on her face. I had the curiosity to lift the lid, and observe the state of the eye; the pupil was completely dilated, and perfectly motionless, though the light fell strong on it. Who can doubt that here the insensibility of the retina depended on the deficiency of its circulation? But to return to the little patient. The next day she had vomited her food several times; it was therefore directed that she should take no other nutriment than a desert spoon-ful of ass's milk every hour, and this was strictly

obeyed, and continued for several days. The child wasted, her features grew sharp, every now and then she looked fretful, and utterred a faint squeaking cry; the eye balls became sunk in the socket, like those of a corpse that had been dead a month; the skin continued cool, and often cold, and the pulse weak, tremulous, and sometimes scarcely to be felt. Under this regimen, and in this way, she continued to go on for several days. At times she revived a little, so as to induce those who prescribed this treatment to believe confidently that she would recover, and she clearly regained her sight, for if a watch was held up to her she would follow it with her eyes. She lived longer than I expected; a full week, and then died with the symptoms of exhaustion, not with those of oppressed brain. The head was opened by a surgeon accustomed to anatomical examinations, and nothing was found but a little more serum than is usual in the ventricles." 361.

Our author concludes that the heaviness of the head and drowsiness, which were attributed to congestion in the brain, really depended on a deficiency of nervous energy—that the bleeding and scanty diet aggravated this state, "and insured the death of the child."

Dr. G. was summoned one day to see a child, to whose head the medical practitioner was about to apply leeches. He found the child lying on its nurse's lap, exactly in the state already described; with the same unwillingness to hold up its head—the same drowsiness—languor, absence of heat and of all symptoms of fever. Dr. G. took the medical attendant into another room, and told him the history of the preceding case and of several others of a similar kind. Instead of applying the leeches, they agreed to give from a pint and a half to a quart of ass's milk in the 24 hours—and to take ten minims of the aromatic spirit of ammonia every four hours. When they met next day, the nurse was walking about the nursery with the child upright in her arms. It looked happy and was laughing. The same plan was continued another day, and on the succeeding day Dr. Gooch took his leave.

"So inveterate is the disposition to attribute drowsiness in children to congestion of the brain, and to treat it so, that I have seen an infant, four months old, half dead from the diarrhœa produced by artificial food, and capable of being saved only by cordials, aromatics, and a breast of milk; but because it lay dozing on its nurse's lap two leeches had been put on the temples, and this by a practitioner of more than average sense and knowledge. I took off the leeches, stopped the bleeding of the bites, and attempted nothing but to restrain the diarrhœa and get in plenty of nature's nutriment, and as I succeeded in this, the drowsiness went off, and the child revived. If it could have reasoned and spoken it would have told this practitioner how wrong he was; any one, who from long defect in the organs of nutrition, is reduced so that he has neither flesh on his body, nor blood in his veins, well knows what it is to lay down his head and doze away half the day without any congestion or inflammation of his brain. This error, although I have specified it only in a particular complaint of children, may be observed in our notions and treatment of other diseases, and at other periods of life. If a woman has a profuse hæmorrhage after delivery, she will probably have a distressing head-ache, with throbbing in the head, noises in the ears, a colourless complexion, and a quick, weak, often-thrilling pulse, all which symptoms are greatly increased by any exertion. I have seen this state treated in various ways, by small opiates, gentle aperients, and unstimulating nourishment, with no relief. I have seen blood taken away from the head, and it has afforded relief for a few hours, but then the head-ache, throbbing and noises have returned worse than ever; the truth is, that this is the

acute state of what in a minor degree and in a more chronic form occurs in chlorosis, by which I mean pale-faced amenorrhœa, whether at puberty or in after-life. It may be called *acute chlorosis*, and like that disease is best cured by steel, given at first in small doses, gradually increased, merely obviating constipation by aloetic aperients." 365.

Dr. Gooch is unwilling to encumber this paper with a multiplicity of cases, but states generally that the above are only specimens of a class, of which he has seen enough to convince him that they deserve the attention of the profession. Dr. Gooch refers to the excellent remarks of Dr. Marshall Hall on this class of affections. Dr. G. candidly acknowledges that he has been anticipated by Dr. Hall on this point, but so far from regretting it, he rejoices to find himself supported by such good authority.

"The children who were the subjects of this affection, and were thus treated, died not with symptoms of oppressed brain, but with those of exhaustion, and on examining the head after death, the blood vessels were unusually empty, and the fluid in the ventricles rather in excess; in two instances death was preceded by symptoms of effusion, viz. blindness, a dilated pupil, coma, and convulsions; and after death the ventricles were found distended with fluid to the amount of several ounces, the sinuses, and veins of the brain being remarkably empty. I believe the prevalent notion of the profession is, that all sudden effusions of water into the brain are the result of inflammatory action; but putting aside for a moment this dogma of the schools, consider the circumstances of this case. For several days before death, all that part of the circulating system which was cognizable to the senses, was at the lowest ebb, consistent with life, and after death the blood-vessels of the brain were found remarkably empty of blood, and the ventricles unusually full of water. From such facts I can draw no other inference than this, that this sudden effusion was a passive exudation from the exhalents of the ventricles occasioned by a state of the circulation the very opposite to congestion or inflammation. This is corroborated by the dissection of animals which have been bled to death. Drs. Saunders and Seeds, of Edinburgh, found that in animals bled to death, whether from veins or arteries, there was found more or less of serous effusion within the head and Dr. Kelly thus expresses himself:—'If instead of bleeding usque ad mortem we were to bleed animals more sparingly and repeatedly, I have no doubt that we should succeed in draining the brain of a much larger quantity of its red blood; but in such experiments we shall, I think, find a larger effusion of serum." * * * 'Though we cannot, by general depletion, entirely or nearly empty the vascular system of the brain as we can the vessels of the other parts of the body, it is yet possible, by profuse hæmorrhages to drain it of a sensible portion of its red blood, that the place of this spoliation seems to be supplied both by extra and intra vascular serum, and that watery effusion within the head is a pretty constant concomitant or consequence of great sanguineous depletion.' But if this is true, it is of great practical importance, for if we take delicate feeble children, and by bleeding and purging for an imaginary conjestion of the brain, reduce their circulation to a very low ebb and keep it so, we run the risk of producing that very effusion of serum into the brain which we are endeavouring by our remedies to prevent." 368.

Dr. Gooch does not expect that medical men will take his word as conclusive evidence for the truth of this paper—nor does he wish it. All he asks is that they will allow his observations and reasonings to lead them to look out for similar cases, and judge for themselves.

"With regard to the point that heaviness of head and drowsiness in children often depend not on congestion, but on deficiency of nervous power, and require for their cure not

depletion, but support, I am quite satisfied that candid observers will find that I am right. With regard to the other point, that sudden effusion of serum may take place in the brain from a state of the circulation, the opposite to congestion or inflammation, it is more likely, even if true, to be overlooked; for such is the force of preconceived opinion, and such the prevalent notions on the subject, that the following will be the process in most minds. A child has been suffering some obscure symptoms for many days, when suddenly and unexpectedly it becomes blind, its pupils are dilated and motionless, it becomes convulsed, comatose, and dies. On opening the head serum is found in the ventricles, and without any further enquiry it is immediately taken for granted, that this effusion was the effect of overlooked inflammation of the brain, and regret is felt that active depletion had not been employed; the inference may be a correct one; all I contend for is that it should not be taken for granted, but that those circumstances should be minutely enquired into which throw light on the state of the circulation in which the effusion occurred. 374.

We strongly recommend Dr. Gooch's observations to the attentive consideration of our professional brethren.

VIII.

I. ANATOMIE PATHOLOGIQUE DU CORPS HUMAIN; OU DESCRIPTION AVEC FIGURES LITHOGRAPHIEES DES DIVERSES ALTERATIONS MORBIDES DONT LE CORPS HUMAIN EST SUSCEPTIBLE. Par *J. Cruveilhier*, Professeur d'Anatomie, &c. First, Second, Third, and Fourth Livraison. Paris, 1828–9.

II. ELEMENTS OF GENERAL AND PATHOLOGICAL ANATOMY, ADAPTED TO THE PRESENT STATE OF KNOWLEDGE IN THAT SCIENCE. By *David Craigie*, M. D. 8vo. 1828.

[ART. I.]

THE utility of plates, in simple anatomy, may well be disputed. In general, it is not so much the colour and appearances of parts that we want to learn, as their relative position and connexion with each other. But the utility, the absolute necessity of plates to convey similitudes of morbid anatomy, cannot for a moment be questioned. In this latter study, opportunities are transitory, and the eye easily forgets that which it has but seldom seen. The most faithful verbal description fails to communicate any thing like an accurate conception of morbid structures, and is often unintelligible and even disfigured by the dominant idea of the observer. Neither are anatomical preparations without strong objections. They are altered and denaturalized by the very means of their conservation—and, at all events, must be confined to the hands of a very few, and cannot be multiplied through the instrumentality of the press. A practice the most extensive cannot furnish specimens of all diseased organs and textures. Faithfully executed plates—faithful as to form, colour, dimensions, are as lasting as Nature, and secure from the vacillations of systems and theories. They always reproduce the same images in the mind—recal that which we have once seen—convey to others what they do not know—and leave impressions as profound as they are durable.

Eustachius deplored in the decline of his life that he had spent so much time in examining the sound structures of the body, that might have been more usefully employed in the investigation of diseased organs. Perhaps the same regret has been felt by many others since the time of Eustachius, though not so strongly expressed. At present the attention of the profession is sufficiently directed to the study of morbid anatomy, and the two works at the head of this article will shew that on both sides of the channel physicians are alive to the value of pathology. The works, however, are very different from each other. Dr. Craigie has, with infinite toil, care, and erudition, compiled a systematic verbal discussion of the various alterations which the different tissues and organs undergo in the progress of disease. It is, of course, unaccompanied by plates. It is, as is specified in the title, an *elementary* work, and consequently incapable of analysis. But we have no hesitation in characterizing it as a compilation of uncommon merit, and one which ought to form a book of reference for every practitioner, when investigating morbid structure. M. Cruveilhier's work is of a very different description—a series of cases, with faithful plates of the morbid parts, except that the diseases are classed according to the organs in which they take place. This is somewhat on the plan of Morgagni. The drawings appear to have been made as the cases occurred, and each case is generally followed by a commentary, often tedious, and uninteresting. The author is evidently placed in a situation very favourable for the study of morbid anatomy, and for the comparison of sound with diseased structures—a point of the greatest importance. It is expected that the work will be completed in about 40 livraisons or fasciculi, of which we have received four. This being the nature of the work—cases and plates—we are consequently enabled to give some account of it as it proceeds.

The first fasciculus commences with a case of transformation of the placenta into hydatidiform vesicles, of which two large plates and numerous minor figures are given.

Case. Madame ———, aged 24 years, previously in excellent health, became pregnant apparently soon after marriage. In the fourth month she experienced a considerable uterine loss of blood accompanied by acute pains in the loins, which recurred from time to time afterwards. In the 7th month she had strong expulsive pains, with considerable uterine hœmorrhage, in the midst of which she discharged a large mass, one half of whose surface was vesicular the other not. A minute description of this mass, together with faithful representations of it, our author considers calculated to throw light on the theory of those singular productions known under the names of hydatid mole, vesicular mole, hydrometra hydatidica, uterine hydatids, &c. We are unable, of course, to convey a description of these plates in words: but we may briefly notice the conclusions to which M. C. has come from the anatomical examination. 1mo, He thinks this case clearly proves that placental hydatids are not a species of entozoæ, as Tyson, Goez, Cloquet and others have thought them. 2ndo, He considers it demonstrated that they are the result of a transformation, not of lymphatic vessels, as Bidloo and others have imagined; but of the sanguiferous vessels of the placenta, as may be clearly seen, both in the preparation and in the plates. Indeed Ruysch, Albinus, and Gregorini had already shewn this same transformation

formerly. The mode of transformation which our author imagines, we need not stop to examine. 3tio, This vesicular transformation, he observes, is a certain, and perhaps a very frequent cause of abortion. In examining a number of expelled ova, he found a considerable proportion of the placental masses containing vesicles developed in their substance. The author has met with cases where there were diseases of the placenta of different kinds—even suppuration of the membranes, and suspects that they are more common than is generally suspected.

The subject of the third plate is a curious instance of hypertrophy of several of the cervical ganglia, one of them being upwards of two inches in length by an inch in diameter! Some of the nerves were enlarged, but not in proportion to the enlargement of the ganglia. As the case was met with in the dissecting room, and no information could be obtained respecting the history, it is needless to pursue M. Cruveilhier's conjectures as to the causes and effects of such an increase of structure in nervous ganglia.

Case and Plate 4.—CANCER OF THE KIDNEY.

Vavoques, aged 53 years, entered the MAISON ROYALE DE SANTE, on the 9th of June, 1828, in the following condition:—emaciation without any yellow tint—extreme debility—œdema of the lower extremities—diarrhœa—thirst—smooth and pale tongue—no pain in any part of the body. On examining the abdomen, a large tumour was discovered in the left flank, indolent on pressure, and hitherto unobserved by the patient himself. It extended from the margins of the ribs of that side to the iliac fossa. At first M. C. thought it was an enlarged spleen; but the patient had not had any kind of fever for 20 years. On a more minute examination, he found the tumour to make part with the posterior parietes of the abdomen, and to be quite immoveable. The patient observed that five months previously he had been seized with a severe pain in the region of the left kidney, succeeded by hæmaturia that lasted a month, at the end of which the urine became natural. After this the diarrhœa without griping came on and continued. From these data our author came to the conclusion that the patient laboured under two distinct maladies, viz. an organic disease of the kidney, and chronic inflammation in the colon. The former might spare the life of the patient for many years—the latter must prove fatal unless remedied by art. Opiates and other medicines were directed, with farinaceous food, and blisters to the abdomen. But the diarrhœa continued—painful bleeding hæmorrhoids supervened—pulmonary affection came on—and the patient sank exhausted, with great infiltration of the lower extremities.

On dissection, the tumour was found to be an enlarged and diseased kidney. The morbid structure was various in kind, but chiefly what is called medullary or cerebriform cancer, mixed with fungus hæmatodes, and masses of scirrhus. The ureters were entirely blocked up, so that no urinary secretion took place in that side. There was ulceration of the mucous membrane of the colon.

Remarks. Malignant disease of the kidney is often of very difficult diagnosis. Most frequently there is no local symptom (as in the above case) but merely a gradual wasting of the flesh—a general malaise—the real seat of the malady being accidentally discovered, when not sought for. Our author relates an instance of a female aged 60 years, who came into the

Hôtel Dieu, more for rest than for any thing else, according to her own account. She was emaciated and sallow; but, in all other respects, the various functions appeared to be going on perfectly regular. After a time she demanded her discharge. Four or five days afterwards she became comatose, and sank. On dissection, the cause of death was found to be inflammation of the membranes of the brain. Our author was not a little surprised to find the right kidney greatly enlarged and completely disorganized, being converted into a state of carcinoma, the pelvis filled with black sabulous matters. The secretion of urine had not therefore been entirely suspended.

The above case gives the author an opportunity of broaching a great principle in pathology, which he promises fully to illustrate in the course of the work—namely, that "*the organic alterations, known under the name of productions, transformations, degenerations, &c. are the result of a deposit of matters secreted into the cellular tissue—hence the separation, at first, and ultimately the atrophy of the proper tissue or structure of organs or parts.*" Hence it is that the molecules of the original tissue, although dispersed, as it were, may continue to fulfil their functions to a certain extent, until they are entirely transformed into the morbid structure.

Case.—Plate 5. ACUTE NEPHRITIS—RAMOLLISSEMENT—ABSCESS AROUND THE PELVIS OF THE KIDNEY OPENING INTO ITS CAVITY.

Madame B. aged 63, of excessive embonpoint, was brought into the MAISON DE SANTE on the 12th September, 1828, with all the symptoms of asthma. There was much orthopnœa—face pallid—pulse somewhat fuller than natural. All that could be learnt was that the patient had been in this state for a fortnight—that she had been vomited, and twice bled. Sinapisms were applied to the feet, and an expectorating mixture was prescribed. On the 13th the oppression of breathing had entirely disappeared—yet the countenance indicated an extraordinary state of anguish and general malaise. She had vomited the whole night, and the least ingestion of drink produced reiterated nausea. The pulse was nearly natural. The medicine was discontinued, yet the sickness persisted—and the profound prostration which the patient evinced induced our author to suspect some dangerous internal disorder, the nature of which he could not divine. 15th, The abdomen was painful on pressure, especially in the left iliac region. But there was no tension—no distension—no fever. Still he thought there must be some disorganizing inflammation going forward, and therefore he ordered 20 leeches to the abdomen—sinapisms to the feet. In the evening the anguish, the vomiting, and the prostration had increased. It was now ascertained from the relations of the patient that the vomiting had continued ever since the commencement of the illness, and had been attributed to indigestion. Twenty more leeches were applied to the abdomen—blisters to the insides of the thighs—an opiate. 16th, The abdomen was still more painful; but void of tension. The anguish was inexpressible—respiration laborious—features altered—intellects undisturbed. She died in the course of the night.

Dissection. On opening the abdomen the peritoneum appeared sound. The exterior of the liver, spleen, stomach, and intestinal canal offered nothing particular. There was no ramollissement, and but very trifling marks of inflammation in the mucous membrane of the stomach. In short, our author was at a loss to discover any cause for death in the abdomen,

and therefore proceeded to examine the thorax. Nothing was found there unhealthy! The kidneys only remained for examination. A large mass of fat was first removed from around the kidneys. In the left was found a purulent depôt in the neighbourhood of the pelvis, communicating with this cavity by means of two apertures. In the pelvis were some uric acid calculi, and a series of the same along the ureter, which was thickened and diseased. The tissue of the kidney was very much softened. The other kidney was completely atrophied.

Another investigation into this woman's history only brought to light the following facts. She had never passed any gravel. About four years previously she began to complain of dull pain in the loins, which was considered to be rheumatism. She had nausea and occasional vomiting, which were attributed to indigestion.

The author makes a judicious remark respecting the examination for a renal disease. Pressure is generally made on the abdomen; but this will seldom be sufficient. One hand should be pressed on the parietes of the loins, opposite the kidney, and with the other pressure should be made anteriorly, when enlargement or tenderness, if existing, will be detected. The above case shews that the asthmatic attacks were purely sympathetic—in other words, nervous. The vomiting, in nephritic complaints, shews the sympathy between the stomach and the kidneys. The author thinks it probable that, in this case, the calculi in the pelvis of the kidney were the primary cause of the inflammation. The case altogether is calculated to shew the difficulty of medical diagnosis, especially where renal diseases are in question. This brings us to the conclusion of the first fasciculus of the work.

The second livraison is much occupied with congenital malformations, especially club-foot, of which we can take no notice. We then come to diseases of the spleen, of which some cases and plates are given.

Case.—SPLENITIS—CONCRETE PUS.

N———, aged 28 years, of strong constitution, and a cook by trade, entered the MAISON DE SANTE, in the following condition:—face flushed—tongue red and shining, but not furred—pulse moderately quick—perspiration abundant and constant—rheumatic pain in the left shoulder. An attentive examination of thorax and abdomen disclosed no appreciable cause for these symptoms. All that could be learnt from her history was that, a fortnight previously she had become affected with an intermittent fever, and had taken sulphate of quinine. Our author merely put her on rigid diet, and waited the event. She remained perfectly stationary for eight days. The doctor was puzzled. He ordered some leeches to the epigastrium, not knowing what else to do. To interrogatories respecting any symptoms of ague at any particular period of the day, she always replied in the negative. All at once, in the evening of September the 11th, a formidable train of symptoms set in. She had a marked rigor, followed by a sense of suffocation, with inexpressible anguish, nausea, and vomiting of bile. These symptoms subsided in the night, and next morning she was found in her usual condition. Further examinations led to no satisfactory result. But suspecting a latent

inflammation of some organ, he ordered 20 more leeches to the epigastrium —sinapisms to the feet—and blisters to the insides of the legs. 12*th September.* Nearly at the same hour as before, the anguish and suffocation came on, with perpetual restlessness and bilious vomiting. The countenance became greatly altered. She said she was suffocating—she was dying. These were all the words she would speak, putting her hand sometimes to the sternum, sometimes to the epigastrium. The Doctor now concluded that the disease was a "pernicious fever," and prescribed the quinine, in doses of twelve grains a day, with eight grains in lavement. In the evening he was agreeably surprised to find the patient much better; but she soon after had sickness and hiccup. 13*th.* To day the epigastrium is very tender on pressure. The quinine to be discontinued, and leeches to be applied to the epigastrium. Quinine to be given in lavement, and to be applied to the denuded blistered surfaces. 14*th.* Complained much of the pain in the left shoulder, which had disappeared for some days. The abdomen is soft and void of tenderness—tongue still very red—the pulse not very quick. The quinine in lavement to be continued. She continued in much the same state till the 19th—the nausea and vomiting still persisting. The Doctor now suspected that some viscus was undergoing a disorganising process, and his suspicion fell on the liver, which he had often known to become studded with abscesses, and yet without any symptom during life that indicated such a state of things. The quinine was suspended—blood was drawn from the arm—amelioration of the symptoms—less sickness of stomach. In the course of the succeeding days she had warm baths—and the vomitings entirely ceased. The respiration was short, but there was no oppression complained of. She felt much better, and asked for food. Still the quickness of the pulse and the *tout ensemble* of the case indicated that there was mischief going on in some internal organ. 26*th.* Jaundice supervened, and confirmed our author in his opinion that the liver was suffering, though there was no local symptom existing. During the next three days all things got worse, and the patient died on the 29th very suddenly.

Dissection. On accurate examination of the liver our author was surprised, and rather mortified to find it perfectly sound! The spleen was larger than natural, being eight inches in diameter. Its consistence was firm, and it was covered with pseudo-membrane. The corresponding portion of diaphragm was lined with false membrane presenting numerous red patches, which were found to be blood. The false membrane being stripped off the spleen, our author was struck with the variety of colour which the surface of the organ presented. The upper extremity was marbled white and red, and the other portions were of all colours from jet black to milk white. These differences were owing to different states of disorganization. On slitting the organ into two portions, the parenchymatous structure was found to be infiltrated with concrete pus, of different hues. In only one place was there a small depôt of liquid pus. All the other organs of the body were sound—even the lungs, notwithstanding the dreadful sense of suffocation which the patient experienced.

Remarks. The above case affords our author much food for reflection. In the first place, here was a subacute inflammation of the spleen going on to suppuration, without any local symptom to indicate its existence. Then comes the question, was this the cause or the consequence of the periodical

fever and other phenomena? M. C. concludes, at once, that the splenitis was the cause of all—the same as an inflammation of the lungs would cause symptomatic fever during its existence. All diseases of the spleen, in our author's experience, presented intermissions or remissions, which he accounts for, by the periodicity of its functions. It is true that he does not insist on the affection of the spleen being the cause of the phenomena at the beginning of an ague attack; but no doubt, he says, can exist of the influence which this organ exerts at a more advanced period of the fever. In a number of intermittents he has observed an intumescence of the spleen during each paroxysm; but the periodical afflux of blood to this organ seldom passes into inflammation. The sense of suffocation and shortness of breath, in the above case, he attributes, and with fair reason, to the adhesion of the spleen to the diaphragm, and inflammation on the surface of the latter organ.

The author makes some smart remarks on therapeutics in this place. He observes that this sanguineous fluxion is near akin to inflammatory engorgement, and demands a more active treatment than is usually employed by his countrymen. When there are symptoms of congestion or inflammation, the depletion should be prompt and decided till they disappear or until an apyrexia obtains, when the bark should be given as freely as the depletion was used boldly before.

REDUCTION OF THE SPLEEN INTO A PULPY MASS.

Of all organic changes that take place in this viscus, induration and softening are the most common. The former is almost always accompanied by increase of size and weight, together with fragility or cohesion of great variety in kind and in degree.

In ramollissement, the spleen never acquires such volume as in induration of the organ. The part which these splenic alterations play in the production or course of fever it is not easy to ascertain; but the author thinks that the following case contributes to the solution of the question.

Case. Madame N———, aged 30 years, worn down by chagrin and sorrows of every kind, became feverish on the 10th of August, but did not send for the author till the 12th, when he found her with violent headache—oppression at the præcordia—pain in her limbs—quick pulse—red tongue—urgent thirst—great inquietude, &c. Examination of the abdomen led to no discovery.

The patient complained of pain under the false ribs on the left side. Twelve leeches to the epigastrium. 13th. Nothing remarkable. Night of the 13th very restless, with general malaise, fever, and feeling of indigestion. A new examination of the abdomen detected no tender spot; but she still pointed to the left side as the seat of her malady. Twenty more leeches to the epigastrium. The morning of the 15th was calm, but in the night the symptoms were all renewed. The day of the 16th was very good, and so was the night. 17th. All the bad symptoms returned, with faintings on the slightest movement. The complaint now assumed the appearance of a pernicious remittent fever, of which she died on the 21st of the same month.

Dissection. There could be but two opinions on this case, says the author.

"Was it a case of gastritis? Or, was it a pernicious remittent?" The dissection was made within nine hours after death. The abdomen was distended—the stomach contracted. Its internal surface was tinged, in some places, with bile, and presented some points of injection of a darkish colour. The same might be said of the lower portion of the ileum, near the valve of the colon. There was considerable injection of the mucous membrane of the transverse arch of the colon. The colon generally was loaded with fæcal matters. The spleen was double its natural size—and so soft that it would scarcely bear handling without tearing to pieces. It was converted into a brownish pulp that almost issued forth like a liquid. The vessels of the liver were gorged, but its substance was pale. The thoracic organs were sound. The brain and spinal marrow could not be examined.

Our author thinks there cannot be a doubt that the ramollissement of the spleen commenced long before the inflammatory action in the stomach and bowels, and that it was the grand cause of the fever, and of the fatal termination of the complaint. We think it not improbable; but still there is no certainty that this disorganization of the spleen did not take place during the fever. We grant, however, that in this case the probability is in favour of M. Cruveilhier's opinion. Another case of chronic ramollissement of the spleen is given, of which we shall state the more prominent particulars.

Case.—M. C. was called into consultation on the case of Mad. A——, whom he found in the following condition:—profound comma—immobility—complete insensibility of the upper extremities, very little in the lower—pupils contracted—respiration regular—pulse regular. The prognosis was grave. The complaint had commenced ten or twelve days previously with violent head-ache, for which leeches had been applied to the anus and epigastrium. The bleeding was copious and followed by syncope, to which the comma succeeded. Sinapisms and blisters were applied in considerable numbers. She recovered rapidly, and our author saw no more of her till fifteen days afterwards, when he was again summoned, on account of constant vomiting, which no medicine could assuage. He now learnt that the comma had disappeared in about 24 hours after the first consultation, and was followed by complete apyrexia. Some errors of regimen reproduced the febrile condition, accompanied by the vomitings above-mentioned. She had now the complexion of a person after an intermitting or remitting fever of long duration—great anxiety—small and rather quick pulse. Nothing wrong could be detected about the abdomen, nor was any pain complained of. Nothing hitherto could assuage the sickness of the stomach—and during six weeks of unceasing efforts, that is, until her death, all remedies failed to quell the gastric irritability. She died in a state of extreme marasmus. What organ was here affected? Dr. C. at first conjectured there was ramollissement of the spleen; but the protraction of the disease dissipated this idea. The liver or the stomach was then considered to be the seat of the malady. On dissection, however, the stomach was found perfectly healthy—as was also the liver. The spleen (of which a beautiful drawing is given) was greatly enlarged—of a deep brown colour—so soft that it felt like a bag full of fluid. An incision was made into it, and a very gen-

tle pressure caused a considerable quantity of a brownish fluid to issue forth, of the consistence of thin jelly.

The foregoing case is very remarkable, on account of the intense gastric irritability which prevailed from the beginning to the end of the disease, and may fairly be said to have occasioned the death of the patient.

The third livraison commences with diseases of the lungs, and contains several beautiful plates.

Case. PULMONARY APOPLEXY.

Miss Boran, aged 44 years, entered LA MAISON DE SANTE on the 31st of October, 1828, with the following symptoms:—face of a violet colour—expectoration of pure blood—respiration very quick, but she did not complain of oppession—pulse scarcely perceptible. Auscultation and percussion revealed nothing satisfactory relative to the lungs. The action of the heart was tumultuous—slight œdema of the lower extremities. It was ascertained that, 15 days previously, she had violent palpitations that lasted three days successively, and left a sense of oppression about the heart. A physician prescribed an emetic, immediately after the operation of which the hæmoptysis appeared. This continued till her death on the 2nd of November.

On dissection, the lungs were found sprinkled with numerous depôts of blood, very exactly circumscribed and strongly contrasting with the perfectly sound lung in their immediate vicinity. Their size varied from that of an almond to that of a hen's egg. At first sight they appeared to be composed of blood alone; but on more accurate examination, it was found the blood was infiltrated into the cellular tissue of the lungs, and the bronchial tubes sometimes traversed these depôts. The left ventricle of the heart was in a state of hypertrophy, and the auriculo-ventricular opening of that side was diminished in size.—A very fine plate of this case is given.

The term apoplexy, originally confined to sanguineous hœmorrhage in the brain, is now transferred to depôts of blood in the lungs by a great number of accurate pathological observers. There certainly is a very great analogy between the two states. But the brain and the lungs are not the only structures in the body which are subject to these spontaneous infiltrations of blood. The skin and the subjacent cellular tissue, our author remarks, present the same phenomena, as in the purpura hæmorrhagica, petechiæ, scorbutic ecchymosis, &c. Even the muscles are the seats of these depôts, as we see in those of the back among epileptics who happen to die during the paroxysm. The liver, the spleen, the uterus, heart, all offer examples of apoplexy. One of the most remarkable cases on record, was read before the Anatomical Society lately by M. Robert. All the organs, the skin, the cellular membrane, the muscles, the brain, lungs, liver, spleen, pancreas, uterus, &c. were studded with sanguineous depôts. In general, however, the infiltration is confined to a single organ, and to only a portion or portions of that organ. "What is the order of vessels concerned in this pathological state of the lungs?" asks M. Cruveilhier. Our author as well as Laennec believes that the *qualities* of the blood contribute as much towards these spontaneous hæmorrhages as the altered condition or power of the vessels. The infiltrations seen in scurvy offer, he thinks, incontestible proofs of this doc-

trine. It is remarkable to suppose that a vitiated condition of the blood may weaken the vessels through which it circulates, and that thus their parietes may more readily give way than under other circumstances. But still the localization of these depôts, and the accurate manner in which their boundaries are circumscribed, would lead us to think that there must be a predisposition, that is, a weakness in the vessels of those particular localities, before the hæmorrhage occurs.

In respect to therapeutics, our author does not appear to make any reference to this local debility of vessels. "In pulmonary apoplexy," says he, "large bleedings, cutaneous and intestinal derivations, but especially large bleedings, are our sole means of security." Unquestionably it is highly necessary to lessen at once the whole mass of circulation, not only by bleeding but by other evacuations also. Yet, this being done, we apprehend there are some other indications of great importance to pursue—namely, to quiet the hæmorrhagic orgasm by opiates, and give strength to the vessels by such astringents as do not stimulate. The author seems indeed to admit this, though under other terms. "We must," says he, "take into consideration the state of spasm, or rather the general disturbance occasioned by the suddenness of the attack. The patient may succumb immediately from the effects of this spasm, even where the hæmorrhage is very moderate, and the portion of lung disorganized but of small extent. This spasm surmounted, the part may become re-organized, as it were, and resolution take place." Now M. Cruveilhier points out no way of overcoming this spasm or this commotion in the system, unless it is by vigorous depletion, which we venture to say will not effect the purpose.

APOPLEXY OF THE HEART.

A female in the Salpetrière, aged 60 years, presented for several years the symptoms of dilatation with hypertrophy of the heart. She died in the usual way that people die in this class of diseases. On dissection they found the heart completely enveloped in a layer of blood, which was moulded exactly to the shape of the organ, and prolonged around the roots of the great vessels. There was also some fluid blood in the cavity of the pericardium. The layer of blood being removed, there were seen on the surface of the left ventricle several black ecchymoses, or rather sanguineous depôts, seated immediately under the attached pericardium. In one of these there was a porforation, which was evidently the source of the extravasated and concrete blood. A probe passed from this aperture into the cavity of the ventricle. But it was discovered that the extravasated blood did not proceed from the interior of the heart, as the probe had passed through the softened parietes of the depôt.

APOPLEXY OF THE SPINAL MARROW.

We must look over several cases of gangrene of the lungs, diseases of the liver, and aneurisms of arteries, in order to give a case of apoplexy of the spinal marrow.

Case. The patient was Joseph Mausard, a medical student of slender make, and delicate constitution, but who had enjoyed good health till four

or five years before the date of report, when he experienced suddenly a severe pain in the back of his neck, succeeded by some stiffness in the motions of his left left leg and arm. It was considered rheumatic, sudorifics were given, and he got well in about three months. On the 10th of December, 1828, he was seized, without any apparent cause, with sharp pain in the nape of the neck abreast of the 3d or 4th cervicle vertebra. In the course of a few days this pain extended along the spine with abolition of motion in the upper and lower extremities. The head was inclined towards the left shoulder, and could not be moved from this position without much pain. Mean time there was no febrile action in the system—the appetite was good—the digestion easy—respiration natural. There was now paralysis of the trunk, bladder, and rectum. The abdomen became distended—the urine was obliged to be drawn off by the catheter. In this state he entered the MAISON DE SANTE under M. Dumeril, on the 21st of December, eleven days after the commencement of the attack. The following was the state of the case on the 1st of January, 1829, which state remained unaltered till the patient's death. Complete immobility—countenance calm—pulse regular and not weak—no head-anche—respiration natural, as were most of the internal functions—great pain in the right arm, about the shoulder-joint. All other parts were devoid of sensation as well as motion. The motions and urine were passed involuntarily—the appetite was good, the sleep was tranquil—and the spirits were even gay! He continued stationary till about the middle of January, when he began to emaciate rapidly. The integuments over the sacrum sloughed—the appetite failed—sleep could not be procured—a vomiting of blood came on, of which he died on the 18th January, forty days from the commencement of the malady.

Dissection. The spinal canal was laid open throughout its whole extent. The brain and its membranes were perfectly sound. The dura mater of the medulla spinalis being opened, a considerable quantity of serous fluid was found between it and the spinal arachnoid. Through this transparent fluid was seen, abreast of the 4th, 5th, and 6th cervical nerves, on the left side, a dark coloured tumour, in shape like a large almond. The left posterior half of the spinal marrow, in this part, was infiltrated with blood, and, in fact, presented a complete specimen of spinal apoplexy. The sanguineous depôt prolonged itself between the anterior and posterior roots of the cervical nerves above-mentioned, raising and separating them, altering their tint but not their continuity. There was no other visible affection of the spinal marrow externally examined; but when it was slit up, there was discovered a recent extravasation of blood in the centre of the medulla throughout its whole length, so that it was converted into a canal, as it were, full of blood. Much of this fluid was evidently of recent extravasation; but the alteration in the parietes of the canal shewed that some of it had been thrown out long before. In the thorax, the heart and lungs were sound. The stomach and intestines were lined throughout their whole length with a coating of black blood, beneath which the parietes themselves were unaltered in structure.

We had hoped to complete our account of the first four livraisons of M. Cruveilhier, but find that our limits are already exceeded, and that we must stop here for the present. The plates are very meritorious, and the work promises to be one of great value. We imagine that an enterprising publisher might find it worth his while to republish these plates, lithographied

as they now are, and accompanied by a short account, in English, of the cases to which the plates refer. We shall continue our account of the work from time to time.

IX.

THE INFLUENCE OF CLIMATE IN THE PREVENTION AND CURE OF CHRONIC DISEASES, MORE ESPECIALLY OF THE CHEST AND DIGESTIVE ORGANS, &c. By *James Clark*, M. D.

[Art. II. Conclusion.]

CONSUMPTION.

In a former article we gave a full account of the first part of Dr. Clark's Work on Climate. The second part of the same is chiefly occupied with observations on disorders of the thoracic and abdominal viscera. Dr. Clark's long residence in Italy, where he had such extensive opportunities of witnessing not only the effects of climate upon pulmonary diseases, but also the phenomena of these diseases themselves, in all their stages and varieties, gives a great weight to his opinions, and attaches much importance to his observations. On this account we shall pass over the section on disorders of the digestive organs, because the subject is almost exhausted, and because Dr. Clark is probably more at home on the subject of pulmonary affections, for which, rather than for dyspeptic complaints, our invalids seek the blue skies and mild air of Italy.

Dr. C. commences with a sentence gloomy enough, but perhaps not uncongenial with the subject.

"There is no disease in which change of climate is considered in this country of so much importance, as Consumption; and yet it must be admitted, that there is no one in which the hopes founded in such a change, are more constantly disappointed. Occasional examples of its beneficial effects are certainly observed; and, though they bear so trifling a proportion to the cases in which it produces no benefit, or only a temporary and very trifling one, it still remains the chief source of hope and confidence in the treatment of consumption, both to the profession and the public." 223.

A belief in the efficacy of change of air in this terrible malady is of ancient date, and is still universal over the civilized world. In this country, where consumption is so prevalent, the above-mentioned belief is more strong than in most other regions; and the failures are attributed to the late period at which the change of air is made, rather than to the inefficacy of the measure.

"For my own part, although I have witnessed the melancholy issue of too many cases sent abroad at a very early period of the disease, to have much confidence in such a measure singly, still I believe a change to a mild climate, or rather a temporary residence there, to be a valuable remedy, under certain limitations. And I am further of opinion that when a more rational view of the nature and causes of consumption is generally adopted, change

of climate may be made a far more efficient and a more certain remedial agent in that disease, than it has hitherto been." 224.

Dr. C. thinks that, notwithstanding the frequency of consumption here, and the numerous works that have been published respecting its causes, nature, and treatment, yet that these are very imperfectly understood, while the faculty themselves are divided in opinion about them. In respect to treatment, he thinks there is no reason to believe that the physicians of the present day are more successful than their predecessors were ten, nay twenty centuries ago!

Taking tubercles as a fixed point from which to start in his investigations, Dr. C. observes that, "until we arrive at a knowledge of the state of the system which leads to the formation of these bodies, and of the causes which induce this state, we cannot hope to establish rules for the *prevention* of consumption upon any sound principle." Again. "I say *prevention* of consumption—because to cure it, even in its earlier stages, in other words, to remove tubercles already existing in the lungs, is what we can scarcely hope to do." Laennec indeed has remarked that "the cure of tubercular consumption is not beyond the powers of Nature—but art has not been found equal to the task." The utmost which we can expect is to retard the progress of tubercles, when once they are formed. The expulsion from the lungs of tuberculous matter occasionally leads to a permanent cure, and this, we fear, is the only one.

Dr. C. adverts to the litigated question, "are tubercles the product of inflammation, or are they the result of a specific action,' totally unconnected with phlogosis, arising out of a morbid condition of the general system? Much of the preventive treatment depends on the solution of this question. Our author, like most of the modern pathologists, believes that the formation and growth of tubercles are not essentially connected with inflammation.

"It is obvious that, in order that tubercles should be the result of inflammation, there must be some modified condition of the inflammation; and if we inquire more closely we shall find that another disorder is connected with the inflammation, and that this disorder is the essential agent in the production of tubercles. In a healthy subject, I believe tubercles are never the result of inflammation. When, therefore, these appear to be the product of inflammation, it will be found to be inflammation occurring in and modified by a disordered state of the system of a peculiar kind. And surely, it is more reasonable to attribute the tubercles to this cachectic state, which is almost constantly observed, than to the inflammation which is only occasionally detected, and which, in innumerable instances, is found to be of itself insufficient for their production." 231.

Dr. C. does not mean to underrate the injurious effects of pulmonary inflammation in persons disposed to consumption, or already labouring under that disease in its incipient stages. On the contrary he is aware of its importance, and of the necessity of speedily removing it, as he believes that inflammation accelerates the progress of phthisis. Our author has drawn a light but correct sketch of the symptoms which denote the early progress of pulmonary tubercles, which he denominates tubercular cachexy, and which is preceded by a deranged state of the constitution, and followed by the actual disease itself.

"Under the general term, consumption, then, we may comprehend three different forms or stages of disease—1st, general disorder of the health; 2nd, tubercular cachexy; 3rd, consumption, properly so called." 242.

Of the causes predisposing, hereditary, and exciting, we need not speak, as they are sufficiently discussed in various publications.

As it is useless to talk of curing consumption, our only hope is to prevent its occurrence in those who are predisposed to it. The disorder of the general health being attended to, a change of air to a milder climate may be of some service in preventing or retarding the progress of the complaint. The profession is now aware of the impolicy—the cruelty of sending patients to a warm climate after tubercles have begun to soften down and to be expectorated. Still there are annual instances of people being sent, by thoughtless friends and physicians, in this state, to die in Italy, France, or on the road.

"When removal to a mild climate is decided on, the next subject which naturally presents itself for consideration, regards the selection of that which is most suitable to the case. The question has been often put to me—Which is the best climate? The truth is, no one climate or situation is the best in all cases. In the first part of this work I have given the character of the climate of the different places resorted to by invalids, and have endeavoured to draw a comparative view of their respective merits; and to this I beg to refer the reader. With regard to the climates of the south of France and Italy, I may here observe, that for consumptive invalids, in whom there exists much sensibility to harsh and keen winds, and, more especially, if the immediate vicinity of the sea is known to disagree, Rome or Pisa are the best situations for a winter residence. When, on the contrary, the patient labours under a languid or oppressed circulation, with a relaxed habit, and a disposition to congestion or to hæmorrhage rather than to inflammation, and, more especially, where the sea air is known by experience to agree with the invdvidual,—Nice deserves the preference. In cases complicated with gastric irritation, however, Nice is an improper residence, its climate being decidedly inimical to this state. The climate of Hyères may be considered as similar to that of Nice in this respect. The influence of such a morbid condition of stomach in modifying all other diseases, is sufficient to claim for it the chief consideration in deciding upon the particular situation; although, I fear, it is but seldom thought of when the physician is deciding which climate deserves to be preferred. Judging, however, from experience, I should say, that where this state of the stomach exists, a climate which disagrees with it, will do the patient little good, whatever may be the other disease under which he labours.

"With those cases of chronic consumption, therefore, to which I have alluded, and which, according to my observation, are almost invariably complicated with, and, I believe, in a large proportion of cases, chiefly induced by disorder of the digestive organs, Nice will decidedly disagree; and, besides the gastritic dyspepsia, such patients have generally an irritated state of the bronchial membrane with a dry state of the skin and a morbid degree of sensibility of the nervous system,—in all of which states that place is unfavourable. Rome or Pisa will agree better with this class of invalids.

"But the climate which of all others I consider the best suited to consumptive patients generally is that of Madeira. It will be seen by a reference to the meteorological tables in the Appendix, and from the comparisons which I have made between the climate of this island and that of the different climates on the continent of Europe in the article on Madeira, that the winter temperature is considerably higher and more equable, and the summer heat much more moderate than at any of these places. To such consumptive patients, therefore, as are likely to derive benefit from climate, I consider Madeira as affording altogether the best residence. And this opinion does not rest merely on a consideration of the physical qualities of this climate, but is warranted by the experience of its effects on those cases of consumption which alone ought to be sent abroad, as will be seen by a reference to Dr. Renton's table. Madeira has also this advantage (a very great one in my opinion)

over all the other places in the south of Europe, that the patient may reside there during the whole year, and thus avoid the inconveniences and even risks attending a long journey, to which consumptive invalids who pass the winter in Italy must be exposed. The summer climate of the whole Mediterranean, is unsuited to consumptive invalids, and indeed is known by experience to be so pernicious to them, that sailors and soldiers attacked with the disease in the Mediterranean fleet, and garrisons of Malta, &c., are invariably sent to England on the approach of summer." 267.

Dr. Clark is decidedly of opinion that a sea voyage is beneficial in the early stages of consumption, and especially when the disease is accompanied by hæmoptysis.

We can only make room for one short extract before we conclude this article.

"There is yet another measure in the treatment of consumption which requires some notice in this work, as it has been recommended as a substitute for change of climate. In place of sending consumptive patients to pass the winter in a milder climate, it has been proposed to keep them in rooms artificially heated and maintained at a regulated temperature. With the advocates of such a measure the state of the lungs appears to be the only consideration; but it need not be told, that without improving the general health, which cannot be done without exercise in the open air, all our measures directed to the local disease will be fruitless. We may by such means keep down inflammatory action in these organs, but we shall be favouring the very condition of the system which led to the disease, and the removal of which condition can alone afford the patient a hope of recovery. In the incipient stages of consumption, therefore, I consider such a measure as the most improper that can in general be adopted. In the advanced stages of the disease, on the other hand, when all hopes of recovery have vanished, and when removal to a distant clime is totally useless, life may be prolonged, in many cases, by keeping the invlids in apartments, the temperature of which is regulated in such a manner as to maintain the air in as pure a state as may be. Females will, *cæteris paribus*, bear such a system of confinement better than males, from the circumstance of its being more congenial to their usual habits of life. Also in consumption and chronic bronchial disease occurring in the more advanced periods of life, such a measure promises to be much more frequently beneficial than in early life. In cases of inflammation of the lungs also which have occurred during the winter, confining the patient entirely to the house in a regulated temperature, till all symptoms of the disease have ceased, and until the return of mild weather, will be very judicious, more especially when such a person is hereditarily disposed to consumption. But when a person so circumstanced has the means, he should pass the following winter in a climate where confinement would be unnecessary, and where he might improve his general health by exercise in the open air." 273.

We regret our inability to notice the short sections on chronic diseases of the larynx, trachea, and bronchia—on asthma—gout—chronic rheumatism, in which many judicious observations are to be found. But the greatest merit of the work consists in the extraordinary labour, and we believe accuracy, with which Dr. Clark has constructed a series of meteorological tables, ten in number, from the best authorities, shewing the state of thermometer, in every season, month, day, and almost every hour throughout the year, in a great variety of places chiefly in Europe. The more we examine these tables, the more we admire the indefatigable assiduity of the author who compiled them. These tables are, in reality, worth more than double the price of the book, and deserve a place in every medical library. We can only make room for the first five columns of a single table, as a specimen of the whole.

TABLE

Shewing the mean Annual Temperature of different Localities, and also the mean Temperature of the Four Seasons.

NAMES OF THE PLACES.	Mean Annual Temp.	Mean Temp. of the Seasons.			
		Wint.	Spring.	Sumr.	Autum.
LONDON, 1. (A.)	50·39	39·12	48·76	62·32	51.35
Edinburgh, 2. (A)	47·31	39·40	44·70	57·30	47·86
Leith, 3. (A.)	48·36	40·59	45·75	58·27	48·90
Kinfauns, 4.	47·02	39·82	44·60	56·82	46·80
Dublin, 5. (D.)	49·10	39·20	47·30	59·54	50·00
County of Antrim, 6.	47·87	36·75	46·75	58·16	49·83
Kendal, 7.	46·22	36·16	43·79	57·33	46·53
Alderley, (Cheshire,) 8. (A.)	46·80	37·58	45·80	57.10	48·26
New Malton, (Yorkshire,) 9.	47.65	37·79	44·90	59·44	48·65
Oxford, 10.	48·64	37·00	47·10	60·30	50·00
Environs of London, 11. (A.)	48·81	37·20	48·06	60·80	49·13
Bushey Heath, 12.	49·32	38·62	47·06	61·48	51·46
Chichester, 12. (A.)	49·50	38·85	47·76	60·78	50·64
Gosport, 14.	50·24	40·44	47·63	62·00	50·88
Isle of Wight, 15.	51·00	40·31	49·00	63·09	51·63
Cheltenham, 16.	51·32	40·60	50·28	64·32	50·96
Sidmouth, 17.	52·10	40·43	50·66	63·83	53·50
Helston, (Cornwall,) 18.	50·94	43·16	48·76	59·16	52·67
Penzance, 19. (A.)	52·16	44·66	49·66	60·50	53·83
Geneva, 20. (A.)	49·89	33·83	48·90	64·99	50·97
Paris, 21. (A.)	51·50	38·43	50·40	64·47	52·30
Nantes, 22.	55·62	42·23	53·10	70·73	56·41
Bordeaux, 23.	56·48	42·08	56·46	70·88	56·30
Pau, 24.	54·95	41·79	54·96	67·41	55.64
Montpelier, 25.	57·60	44·20	53·33	71·30	61·30
Avignon, 26. (A.)	58·20	42·60	57·13	74·66	59·00
Marseilles, 27. (A.)	59·50	45·50	57·56	72·50	60·08
Toulon, 28.	59·90	43·30	53·70	74·30	59·00
Nice, 29. (A.)	59·48	47·82	56·23	72·26	61·63
Genoa, 30.	60·37	44·57	58·60	75·03	62·94
Baths of Lucca, 31.	55·00	....	....	68·17	
Camajore, (Lucca,) 32. (A.)	58·07	44·70	56·32	71·66	59·58
Sienna, 33.	55·60	40·50	54·10	70·80	57·10
Florence, 34.	59·00	44·30	56·00	74·00	60·70
Leghorn, 35. (A.)	60·00	46·30	57·60	74·10	62.00
Pisa, 36.	60·60	46·03	57·20	75·15	62·80
Rome, 37, (A.)	60·70	48·90	57·65	72·16	63·96
Naples, 38. (A.)	61·40	48·50	58·50	70·83	64·50
Mediterranean, gen. temp. of, 38. (B.)	67·11	57·63	65·50	76·25	69·10
Cadiz, 39.	62·88	52·90	59·53	70·43	65·35
St. Michaels, (Azores,) 39. (C.)	62·40	57·83	61·17	68·33	62·33
Madeira, 40. (A)	64·56	59·50	62·20	69·33	67·23
Santa Cruz, (Canary Isles,) 41.	70·94	64·65	68·87	76·68	74·17
Cairo, 42.	72·17	58·52	73·58	85·10	71·48

X.

LECTURES ON ANATOMY: INTERSPERSED WITH PRACTICAL REMARKS. VOL. I. By B. B. Cooper, F R.S. Surgeon of Guy's Hospital, Lecturer on Anatomy, &c. &c. &c. Royal Octavo, pp. 310. London, 1829.

The number of works upon anatomy at present pouring from the press, argues an increasing taste or necessity for the study, despite of the impediments and difficulties that now beset it. We say an increasing call for anatomy, for no principle in political or other economy is better established than this, that the supply will always be regulated by the demand. There may indeed be an occasional glut, but a few bankruptcies or failures soon trim the balance. The great majority of the manuals and systems of anatomy or physiology of the present day are either avowedly or in reality taken from the French, and our students would seem to imagine, iike our modern play-goers, that nothing whether large or small, opera or interlude, system or manual, can possibly be worth a fig unless it be imported from the other side of the water. God knows we share nothing in common with that Anti-Gallican, exclusive, and bigotted party whose gorges rise at the bare mention of French or Frenchman, and who tickle their John Bullish prejudices by holding all which is not their own in profound contempt. At the same time we are sufficiently patriotic to desire that in knowledge as in war, we should not succumb before the sons of Gaul, but rather endeavour in generous rivalry to lead the van. It is on this account that we are disposed to hail the appearance of the present work on anatomy by Mr. Bransby Cooper with feelings of much pleasure, and we trust that the popular author of the Description of the Ligaments of the Human Body will add another and a greener leaf to the wreath of British writers that already adorn this part of our science.

The present volume merely embraces the anatomy of the bones and articulations, but it is our author's intention to publish another annually in each succeeding season, till the series shall thus be completed. Interspersed with the anatomical descriptions is a concise but accurate account of the physiology, morbid alterations, and injuries of the parts on which the lecturer is treating. It can scarcely fail to be perceived that although differing in toto from the plan of most of the foreign writers, the present must be attended with many advantages to the student. Of the execution we can speak in the most favorable terms, and we have little doubt that when completed, "Bransby Cooper's Anatomy" will become a class-book of much value and great circulation. Of course an analysis of an elementary book of this kind is perfectly out of the question, but the following extract will afford a sample, an imperfect one it is true, of the whole; it is an account of the fractures to which the os femoris is subject.

"*Practical Remarks.*

"Notwithstanding the great strength of this bone, still, as may be said of every cylindrical bone, it is liable to fracture in any part of its extent, either at the point of immediate application of a force, or it may give way in its centre, from a fall on the condyles; in which case the upper part of the bone forms the point d'appui, and the natural curvature of the bone has a tendency to be increased beyond its power of extension, and it necessarily yields. In consequence of the numerous muscles which are attached to this bone, it is ob-

vious that the fractured extremities must vary in their direction, depending upon the influence of muscular power, and the precise point at which the femur is fractured; therefore we will consider individually those particular parts of the bone, which, when fractured, invariably take a certain direction.

"*Fracture of the Neck.*—(*Vide Fig.* 1, *Plate IX.*)—It is unnecessary for me to offer any remarks upon the different opinions which surgical writers have entertained, concerning the union or non-union of this fracture. The diagnosis is always sufficiently distinct to point out the nature of the injury: first, this accident only occurs at an advanced period of life; the limb is shortened and everted; slight extension brings it to its natural length; and rotatory motion during extension produces crepitation. The only accident for which this can be mistaken, is dislocation upon the pubes; but the circumstance of the one being unnaturally fixed, while the other is capable of inordinate motion, will lead to a just knowledge of the injury. From the experience I have had upon this subject, I feel I cannot do better than recommend the practice adopted by Sir Astley Cooper, as laid down in his work on fractures and dislocations.

"*The Trochanter Major* (*Vide Fig.* 2, *Plate IX.*) is sometimes detached from the shaft of the bone:—an accident which it is difficult to detect, in consequence of the small size of the separated portion, and from its not producing any alteration in the direction or length of the limb; the fractured portion of bone being drawn up by the action of the m. gluteus medius and minimus, a considerable separation frequently occurs. In consequence of these two muscles being wholly inserted into the trochanter major, the adaptation of the fractured extremity is difficult both to produce and to maintain; and can only be accomplished by the adduction of the injured limb, in addition to the other ordinary means. I have had an opportunity of witnessing this accident, and experienced all the difficulties I have described.

"*Fractures immediately below the Trachanter Minor.*—(*Vide Fig.* 3, *Plate IX.*)—This accident differs from all other fractures of the thigh, excepting that last described, from the greater displacement occurring in the upper than the lower portion of the bone, in consequence of the insertion of the m. psoas magnus and iliacus internus the upper fractured extremity is drawn forwards, so as to form a tumour in the groin, which deformity can only be obviated by bending the pelvis upon the thigh, so that the patient must be placed in bed nearly in a sitting posture

"*Fracture in the Middle of the Shaft.*—(*Vide Fig.* 4. *Plate IX.*)—When this portion of the bone is fractured, a shortening of the limb invariably takes place, which is produced by the action of those muscles which are attached to the whole length of the thigh-bone. The most usual position of the fractured extremities is, for the lower portion to be drawn upwards and inwards by the abductor muscles, while the upper is thrown outwards, forming in this situation a perceptible protuberance produced by the action of the m. gluteus maximus. This is not, however, the invariable direction; for if the fracture occurs midway between the insertion of the m. gluteus maximus and the external condyle, the m. vastus externus will draw both portions in such a direction as to form a salient angle outwards, in which case very little shortening occurs.

"*Transverse Fracture immediately above the Condyles.*—(*Vide Fig.* 5, *Plate IX.*)—In this case, the m. gastrocnemius externus plantaris and popliteus, draw downwards and backwards the inferior portion of the bone, so that the inferior extremity of the upper part appears to be the one displaced.

"*In Fractures of the Condyles*, the vasti muscles passing around them to be inserted into the patella, admit of but little displacement. They have a slight tendency to be drawn backwards by the m. gastrocnemius externus, and the inner one upwards by the tendon of the m. adductor magnus.

"*Fractures of the Thigh* may be considered of more difficult management than that of any other bone, both in consequence of the difficulty in keeping the parts in apposition, and of the violence necessary to produce solution of continuity.

"In all fractures, the causes of the displacement of the fractured portions of bone is muscle; and as coaptation is necessary for the cure, it becomes the object of the surgeon to place the limb in that situation best adapted mechanically to prevent the influence of muscles, as well as to subdue their irritability by constitutional means. For the first indication various apparatus have been invented, and numerous positions of the fractured limb recommended. It occurs to me, however, that no general practice, no constant rule can be laid down as the best. The surgeon's mind in every case can alone form the means to be adopted, as applicable to the individual instance; bearing in mind that coaptation must not only be produced, but preserved for a longer or shorter period. From the size of the femur, its reparation is not completed, under ordinary circumstances, in less than fifty days." 144.

XI.

ON PULMONARY TUBERCLES, OR TUBERCULAR PHTHISIS.

[Eclectic.]

1. CLINICAL OBSERVATIONS ON PHTHISIS. By *William Stoker*, M. D. [Dublin Transactions.]
2. OF TUBERCLES IN THE LUNGS, OR, PHTHISIS PULMONALIS. By *M. Laennec.* (2d edition.)
3. ON PULMONARY PHTHISIS. By *M. Andral*, Junr. [Dictionaire de Medicine, Vol. XVI.
4. A PRELIMINARY DISSERTATION ILLUSTRATIVE OF A NEW SYSTEM OF PULMONARY PATHOLOGY, &c. By *P. Myddleton*, M. D.
5. REPORT OF MEDICAL CASES, &c. By *Dr. Bright.* 4to. with plates, 1827.

At the head of this article we have indicated four or five of the latest monographs on that destructive disease, TUBERCULAR PHTHISIS—two of them by two of the most distinguished pathologists which France has produced; and one of them by our countryman Dr. Stoker, who as a physician to the Meath Hospital, has had ample opportunities of corroborating or correcting the observations of his illustrious predecessors in this line of research. We have thought that it might not be a useless labour to lay before the profession a succinct account of the present state of knowledge, etiological, pathological, and therapeutical, respecting one of the greatest scourges of the human race—and, for this purpose, we shall principally avail ourselves of M. Andral's dissertation, which forms one of the ablest articles in the dictionary of Medicine, now nearly completed by a galaxy of eminent men on the continent. We conceive that one great use of a medical journal is, from time to time, to bring within the reach of all classes of medical readers, a comprehensive yet concentrated view of the principal diseases which form the objects of our solicitude in actual practice; and thus to keep up as great an equilibrium of information as possible, among those who have, and those who have not, the means of extended investigation, or access to the various works that flow from the medical press. We believe indeed that, multiplied as medical journals have become in this and other countries, there is yet a field for one that should be entirely dedicated to the above-mentioned purpose—a series of SYNTHETICAL or ECLECTIC ARTICLES on the practice of medicine generally. Till such time as a Journal of this kind is attempted, we shall continue to dedicate a portion of our own to this specific pursuit; believing, from the encouragement we have hitherto had that such a line of labour will not be unacceptable to our readers at large.

M. Andral coincides with Laennec and Louis, in restricting the term pulmonary consumption to *tubercular* phthisis. The same view is taken by Dr. Stoker, who regrets to say that "the term phthisis is one too often used (at least in this country) without an accurate idea of its nature." Thus Bayle includes under the definition of consumption, six species of pulmonary phthisis—tubercular, granular, melanose, ulcerous, calculous, and cancer-

ous. That life is occasionally destroyed by one or other of the last five species, we do not deny ; but the tubercular species is the one which meets us one hundred times more frequently than all the others put together. It is therefore quite enough for our purpose in this article—and we agree with the talented writers above-mentioned, that, it would prevent a great deal of confusion if, by the term pulmonary consumption, we always meant tubercular phthisis.

I. STATE OF THE RESPIRATORY APPARATUS IN THE DIFFERENT PHASES OF PULMONARY PHTHISIS.

The lesions of structure are of two kinds—one permanent, namely, the tubercles themselves—the other, variable, consisting of the divers alterations that take place in the surrounding lung, and which give rise to many of the most prominent symptoms of the disease. The tubercles though constant in their existence, undergo changes in their condition, at different periods of the malady—changes which are announced during life by corresponding symptoms. They are hard or crude in the first period—soft in the second —and in the course of evacuation in the third. Laennec regards the "granulations of the lungs," described by Bayle, as the rudimentary condition of pulmonary tubercles—and M. Louis adopts the same opinion. M. Andral, in his "*Clinique Medicale*," has endeavoured to prove that these pulmonary granulations are an accidental tissue, *sui generis*, the product of pneumonia, and independent of tuberculation. He gives very cogent reasons for this conclusion, and it will probably be found to be the correct one. Crude tubercles present themselves under two forms, not essentially different in any thing else than *form*. The tubercular matter is sometimes infiltrated *among* the pulmonary tissue—sometimes deposited in globular masses by itself.—The infiltrated tuberculation is very often confounded with that state of lung which results from chronic inflammation.

After a longer or shorter period, a process of mollescence commences in the centre, and gradually extends to the periphery of the tubercle. Then the circumjacent parenchyma of the lung inflames—a bronchial tube becomes perforated—the tubercular matter issues through this aperture and is evacuated by coughing—and thus a cavity or cavern is formed. If the tubercle be situated in the immediate vicinity of the pleura pulmonalis, the ulcerative inflammation may open a communication with the cavity of the chest, instead of the bronchia, and the tubercular matter is evacuated into that cavity. The cavern formed by the evacuation of tubercular matter in either way, is often much larger than the original tubercle. Sometimes a whole lobe of lung is thus transformed into one vast cavern, the parietes of which are only a few lines in thickness. This, however proceeds from the re-union of several neighbouring cavities, and the consequent destruction of the intervening parenchymatous structure. There is then, as was justly supposed by the ancients, a veritable ulceration of the lungs. The internal surface of these caverns or excavations, is generally of a vivid red color, excepting under certain circumstances where there is a tendency to cicatrization. It is almost always lined by a whitish matter resembling a false membrane, often divisible into layers, and formed, no doubt, by the coagulable lymph thrown out from the vessels. On this internal surface are

seen blood-vessels of considerable size, as also bronchia, which appear abruptly divided where they enter the excavation. Across these caverns are seen stretching bands of condensed cellular substance dividing them into different compartments. In these bands, vessels of considerable size are sometimes found running, and from these, when ruptured, effusions of blood take place. These bands as well as the internal surface of the parietes of the excavation, are sometimes found in a state of gangrene, and exhaling the most intolerable odour. The usual contents of these excavations, however, are a puriform fluid resembling that which issues from scrofulous abscesses, and is evidently secreted from the parietes themselves. Even the little rounded masses of what is called tuberculous matter, are unequivocally secreted, long after the original tubercle is completely evacuated—a fact of some consequence in the etiology of tubercles. Blood is sometimes found in these caverns, as also calculous concretions. Fragments of parenchymatous structure are also occasionally seen swimming in the fluid contents of the cavern, and are expectorated by coughing. Sometimes these caverns are found completely empty.

These excavations once formed, three different conditions may result.—The cavities may continue to enlarge—to remain stationary—or to cicatrize. In order that this last event may obtain, it is essential that the internal surface of the excavation should secrete a matter different from pus—in short, a matter capable of being transformed into a fibrous, cartilaginous, or serous tissue, the same as forms in apoplectic cysts. The progressive changes which take place in the different phases of this salutary process have been carefully ascertained by the unwearied observations and dissections of Laennec, Andral, Louis, and many other continental pathologists of the greatest celebrity.

The part most commonly affected with tubercles is the superior lobe of each lung. In general, tubercles are found in both lungs at the same time, but often more plentiful in one side than in the other. Instances, though very rare, are on record where one lung was perfectly sound, and the other studded with excavations.

The parenchyma situated between the tuberculous masses or caverns, presents different appearances. Sometimes it is healthy, especially where the tubercles are crude—rarely so around excavations. Sometimes the parenchyma is found in a state of acute or chronic inflammation, with yellow, gray, or black induration. This inflammation often obtains but to a very limited extent around the tubercles, and therefore may not be recognized during life. It is rendered highly probable that tubercles are capable of a transformation into calculous masses by a species of desiccation.

The following modification of tuberculation (somewhat different from Andral,) is given by Dr. Bright, under the head of "PHTHISIS PULMONALIS," in his recent work.

"It will be seen in the following Cases, that the tubercular deposit assumes two totally different forms; so that were it not for the fact of their occurring so frequently together in the same individual, in the same lung, and even in the same lobe of that lung, we should scarcely be authorized in considering them the result of the same, or even of analogous morbid actions. It will be seen that sometimes a portion of the lung, varying from the size of a nutmeg to the greater part of a whole lobe, has become of a dense semi-cartilaginous consistence, has assumed a permanent blueish gray colour, and is nearly translucent;

that this has gone on gradually to become yellow in spots, to soften, and to form abscesses of a sluggish character, finding their way in time to some unobstructed bronchus, and discharging themselves by expectoration. The cavity becomes larger and larger by the suppuration of the internal surface, which appears like a secretion from a vascular tissue, with which it is surrounded; this however, is not exactly the case, as there is reason to think that *the cavity actually enlarges*, and therefore that the internal surface must waste, and be renewed by a fresh membrane forming beneath. In other parts of the same lung a very different process has often been going on and a number of minute bodies, not larger than the smallest shot, have been deposited more or less thickly throughout the substance. The lung may scarcely be altered in its appearance; but on pressing it, hard unyielding bodies are distinctly felt; these in a short time enlarge, and when still not larger than small peas, begin to suppurate at the centre; or more frequently, these small miliary tubercles join in clusters, either forming masses of themselves, or enclosing a piece of the lung, which becomes hard and blue and semi-transparent, and either runs into suppuration together with the small tubercles; or, if no suppuration takes place towards the centre, becomes completely separated, and forms a slough in the midst of the cavity, which is surrounded by the tubercular matter in the form of a cyst. These are the two extreme points of the processes which take place in genuine tubercular phthisis; and they admit of many modifications, more particularly when combined with the effusion of fibrin which attends simple inflammation." 149.

The larynx, the trachea, and the bronchia are generally changed, more or less, in structure, during the progress of tuberculation—though sometimes the whole of the air-passages are found in a state of perfect integrity. The changes observable are the products of inflammation—redness, thickening, ulceration of the mucous membrane, with occasional developement of tubercles in the subjacent cellular tissue, especially in the larynx. These have been supposed to be capable of producing all the phenomena of pulmonary consumption; but such a case, M. Andral thinks, is very rare, independent of tubercles in the lungs themselves.

II. CAUSES OF PHTHISIS. The etiology of tubercles in the lungs is a subject as interesting as it is, unfortunately, obscure. "Inflammation," says M. Andral, "appears to me to play a more important part in the production of tubercles than has been assigned to it by the school of Bayle; but on the other hand, this inflammation will not satisfactorily account for the formation of the said bodies, notwithstanding the doctrine of M. Broussais, and his disciples." M. Andral thinks himself justified in concluding contrary to the opinions of Bayle, Laennec, Louis, and we may add Baron, that, in the great majority of cases where tubercles have invaded the pulmonary tissue, there has been previous congestion or inflammation of the said tissue. He draws this conclusion from various practical observations:—thus, phthisis very often succeeds pneumonia, there having been no previous symptoms of tubercles in the lungs. It is true that the opposite party will argue that in these cases, there were latent tubercles in the lungs, and that they were only called into an active state by the inflammation. In the second place, it may be observed that the ancients and many of the moderns generally admitted that phthisis is a frequent sequence of hæmoptysis. The school of Bayle has reversed this precept, and asserted that every case of hæmoptysis which takes place in an individual who afterwards presents symptoms of tubercles, is the product of these tubercles but never the cause of them. M.

Andral, while he admits that hæmorrhage from the lungs is often merely symptomatic of tubercles there, labours to prove that, in some cases at least, the sanguineous congestion is the cause of the tuberculous formation. We think his facts, on this point, are unsatisfactory, and his arguments rather weak.

The fact of tubercular phthisis being often preceded by neglected catarrhal inflammation, is equivocal for the same reasons as have been urged above. M. Andral still thinks that these protracted inflammations of the bronchial mucous membrane tend to develope, if not create, tubercles—and in this opinion we apprehend he will be joined by most observant physicians. The same illustrious pathologist attributes great importance, in the production of tubercles, to partial or local inflammations in the lungs. In these portions he has seen immense crops of tubercles, while in the uninflamed portions there were none. He cannot believe that the tubercles were the cause of the partial inflammation, as Bayle and others have urged.

"In fine," says he, "the observation of symptoms, the dissection of bodies, reasoning founded on analogy, appear to demonstrate that, in the great majority of cases, the development of pulmonary tubercles is preceded by sanguineous congestions, in various degrees, while the opposite circumstances form merely the exceptions."

If we examine into the causes which are generally supposed to favour the development of pythisis, we shall find that they all have a tendency to produce congestion in the lungs—for example, narrowness of the chest, which often leads to hæmoptysis, the frequent precursor of phthisis. Atmospheric vicissitudes—excesses of every kind—even the depressing and other strong passions, have all a tendency to throw an inordinate proportion of blood on the internal organs, and produce pulmonary congestion, The suppression of accustomed discharges, as the menses—the drying up of old ulcers—the retropulsion of cutaneous affections, are all known to be not uncommon precursors of tubercular consumption, and it is unnecessary to observe that they are very likely to produce previous congestion in the lungs. Again, we all know how often tubercular phthisis becomes developed after acute diseases, as fevers, measles, small-pox, and the various phlegmasiæ. These of course, cannot take place without effecting more or less of pulmonary congestion. From all these considerations, M. Andral holds it as proved that, as, at the commencement of all morbid secretions, so in the case of tubercular secretion, there is a state of sanguineous congestion in the vessels of the tissue where the tubercles are deposited. "But this congestion will not, of itself, produce tubercles:—there must be a specific disposition to such disease." This would go pretty nearly to the conclusion that the rudiments or ova of tubercles are born with us; but that congestion or inflammation of the parts containing these ova, exerts a strong influence in their development. In respect to the intimate nature of this specific tubercular predisposition, we know very little. Observation teaches us that, in scrofulous constitutions, whether hereditary or acquired, tuburcles are much more readily developed than in other constitutions. Unfortunately, however, there is no constitution exempt from visitations of this dreadful disease! Tubercles have been found in the fœtus in utero—in every period of childhood—in every age till that of extreme senectitude. Laennec saw a man perish by tubercular phthisis at the age of 99 years. "Too many proofs exist of the hereditary char-

acter of this disease." M. Andral does not believe that the hereditary taint can depend on germs of tubercles transmitted from parent to progeny—but on a *simple predisposition.* We think the former equally and conceivable as the latter supposition. Neither of them is susceptible of direct proof.

III. SYMPTOMATOLOGY. Hacknied as this part of the subject may appear to the sciolist, it is deserving of extreme attention and study by the zealous and conscientious practitioner. Every tyro thinks he can recognize tubercles in the lungs, or tubercular consumption, at a glance; whereas it is very often extremely difficult to distinguish the disease in that stage in which any great hope remains of cure, notwithstanding the aids which semeiology has received from pathology, auscultation, percussion, &c.

Phthisis is divided by systematic writers into three periods, stages, or degrees, to each of which a group of characteristic symptoms is attached. This like many other arrangements, has very little foundation in nature or fact. Thus, in many cases, we find the symptoms of one stage or degree united with those of another stage. In some people we find emaciation, fever, rigors, puriform expectoration; and yet auscultation can discover no excavation. In others, the existence of this excavation is unequivocally proved by auscultation, while there is no appearance of emaciation, &c. M. Andral thinks it much more scientific and useful to carefully analyse each symptom of the disease, and trace it to its source.

COUGH is one of the most constant attendants on tubercles in the lungs. It is owing to irritation of the bronchia, and increases or diminishes with that irritation. In the early periods of the disease, it is often only present at intervals:—in some cases, after having existed, with more or less intensity, for a time, the cough ceases entirely, and the patient wastes away and dies without even a catarrhal symptom. "In such instances," says M. Andral, "I have found crude or softened tubercles thickly disseminated through the substance of the lungs, as well as through the mucous membrane of the bronchia." M. Louis has met with similar cases. The cough, in incipent phthisis, has been characterized as short and dry. This kind of cough certainly is very common at such period—and it may remain so till the patient's death—a circumstance owing either to non-mollescence of the tubercles, or to paucity of secretion from the bronchial mucous membrane. But, in many cases, the cough from the very beginning, is moist, and comes in paroxysms. In numerous instances, among children, our author has seen it take the form of pertussis. Not unfrequently the cough becomes less troublesome in proportion as the excavations are formed—a circumstance which is fortunate for the patient, but should not lull the practitioner into a delusive hope. This event seems to depend on a diminition of viscidity in the expectorated matter. From what has been said, it will be evident that there is nothing so specific in the character of the cough, as to throw much light on the diagnosis of tubercular phthisis.

The study of the EXPECTORATION has excited great interest in all ages. The existence of pus, or of the debris of tubercles, has been anxiously sought. Such researches sometimes lead to probabilities, and are so far useful—but they rarely end in any thing like certitude. In the early stage of phthisis, and before the tubercles have softend down, the expectoration is, of course,

purely a secretion from the mucous membrane of the bronchia, and presents all the varieties of sputum seen in catarrhal inflammation, acute and chronic. Afterwards, when the tubercles begin to break down, we find, mixed with the bronchial mucus, a matter which appears to belong to softened tubercles, and which presents itself sometimes in the form of little globular clots, white and untenacious—sometimes in the form of striæ floating in the mucus. But these suspicious clots (grumeaux) may be nothing but a secretion from the tonsils—and the striæ may proceed entirely from the minute ramifications of the bronchia. Thus, so long as no excavations are yet formed in the lungs, the signs furnished by the expectoration are equivocal or even null. Are they unequivocal when the cavities *are* formed? In these cases, the tuberculous matter and the pus formed from the sides of the cavity, must exist in the expectoration, mixed with the mucus secreted from the bronchial mucous membrane, and we have only to distinguish these different products by their proper physical characters. But, alas! these characters are rendered extremely variable, *first* by the manner in which the bronchia communicate with the excavation—*secondly*, by the number, length, width of the bronchial tubes along which the expectoration travels before it reaches the trachea —*thirdly*, by the quantity and quality of the bronchial mucus with which the tuberculous matter is mixed—*fourthly*, by its longer or shorter sojourn in the bronchia. All the various kinds, colours, shapes and appearances of expectoration from tuberculated lungs and tuberculous cavities, have been so often seen in cases of simple chronic bronchitis, that they can no longer be regarded as affording any *positive* proof of the existence of tubercular phthisis. All that can be said is this:—among the various appearances in the expectoration, there are some that are much more frequently seen in cases of tubercular excavations than under any other circumstances. Such are the globular or rounded masses which are seen swimming in a liquid resembling a thick solution of gum in water. On the other hand, there are cases where tuberculous cavities exist, and yet where the expectoration is scanty, and apparently consisting of the common mucosities that attend the simplest bronchitis. Here we need not speak of chemical tests for tuberculous expectoration. They have long since been discharged as useless.

It sometimes happens that the contents of a large tubercle are evacuated all at once through a bronchial tube; in which case there is a great discharge of pus in which are seen swimming many of the globular clots already described. This is what Laennec has described under the term VOMICA.

The expectoration of phthisical subjects is, for the most part, inodorous—but it is sometimes very fetid, even in early stages of the disorder. This fetor, M. Andral thinks, may sometimes depend on gangrenous patches thrown off from the internal surface of the excavation—but it is also found to exist where there is no gangrene whatever. He has observed it in cases where there was no other disease than simple bronchitis.

The mucous or purulent expectoration in phthisis is often changed into a sanguineous discharge more or less considerable. Hæmoptysis and tubercles indeed are so often seen in connexion, that when we observe the one, we generally suspect the other. There are, however, many individuals who bring up considerable quantities of blood, at various intervals, from the lungs, and who never become phthisical. It is well known, on the other hand, that numbers die every year of phthisis, who never had hæmoptysis.

The discharge of blood from the lungs sometimes precedes the phthisical symptoms—sometimes takes place in the course of the disease—even a few days before death. The blood, in these cases, comes from three sources—the parenchyma of the lung—the bronchial mucous membrane—or the parietes of the excavation.

The RESPIRATION is but little incommoded in very many cases of phthisis, whether the tubercles be crude, softened, excavated, or even surrounded with a good deal of hepatised lung impermeable by the air. But if the phthisis be suddenly developed in the acute form, then the dyspnœa is considerable, and sometimes becomes the prominent symptom of the complaint, causing apprehension in the mind of the medical practitioner that there is organic disease of the heart. Bating this sudden development, we generally find the respiration more or less incommoded by all inflammatory attacks, by the process of digestion, the return of the menses, moral emotions. There are many, however, who have an habitual shortness of breath for many years before the unequivocal development of phthisis. Whether this be owing to nascent tubercles, or an habitual state of plethora in the vessels of the lungs, it is difficult to say.

PAIN is by no means a necessary accompaniment to the formation of tubercles. Those fixed or flying pains which phthisical patients sometimes complain of in different parts of the chest, appear referrible to sympathetic irritations of the pleura. A patient of M. Louis who complained of most violent pain in a certain point of the pleura during life, presented not the slightest trace of inflammation in that membrane on dissection.

FEVER is not found at all periods of tubercular phthisis. Early in the disease there is none; but in proportion as the lung becomes disorganized, we observe the accessions of fever;—at first, rare and erratic, but afterwards the paroxysms approaching each other, till at length there is fever every night. These accessions are characterized by an intense heat, which is not generally, nor even frequently preceded by rigor, or succeeded by perspiration, till the disease is more advanced. In the last stage, the fever is constant, with nocturnal exacerbations terminating towards morning in profuse perspiration, partial or general. Some phthisical patients, however, die, without having experienced any perspirations; and what is curious, there are cases where pulmonary tubercles produce neither cough, expectoration, nor dyspnœa, but merely a simple slow fever, which wastes the patient to a skeleton, and the cause of which often remains undiscovered till the last.

Such are the symptoms of tubercles in the lungs, and their fatal effects on the constitution. It must be evident that there are no pathognomonic symptoms among those described, on which we can depend, for ascertaining the precise nature of the malady—and therefore it is natural that we should have recourse to such other physical investigations as may enable us to strengthen our diagnosis and direct our prognosis. It is in this line of research that the moderns have greatly excelled their forefathers. They could not surpass them in faithful and accurate observation of external symptoms or phenomena; but they have, as it were, added another sense to those previously possessed.

PERCUSSION of the chest, in phthisical cases, furnishes the following information:—1mo. The sonoreity of the thoracic parietes may remain natural, when the pulmonary parenchyma surrounding the tubercles is

sound—or at least permeable by the air drawn in :—and this will be the case whether the tubercles be crude, softened down, or even excavated. 2ndo. The natural sonoreity of the chest may be augmented, when a large excavation exists in the lungs near the surface—or when pulmonary emphysema, or pneumo-thorax obtains. The emaciation of phthisical patients contributes also to the natural sonoriety of the chest. 3tio. There may be a diminution of resonance in the chest, or a dull sound in one or more points. This indicates that the tubercles are agglomerated in considerable quantities—or that the parenchyma of the lungs around the tubercles is hepatized, (a circumstance more commonly the cause of the dull sound than the agglomeration of tubercle)—or, finally, that an effusion of fluid exists in the cavity of the pleura. When the dull sound, suppose under one of the clavicles, is produced by the presence of a large mass of tubercles, it may happen that, after the evacuation of the tuberculous matter, the sound returns. Often around a circumscribed point where the sound is very clear, on percussion, we find the sound quite dull. This indicates the existence of an excavation, surrounded by a portion of hepatised lung.

AUSCULTATION, which, after all, is the foundation or essence of percussion, presents for study the following points :—1mo. Various modifications of the respiratory noise—2do. Several rattles or wheezes which supersede the respiratory murmur—3tio. That peculiar resonance of the voice called by Laennec pectoriloquy. The respiratory murmur remains natural when there is no other affection of lung than the presence of tubercles as yet crude. Under such circumstances, the respiration may even be more loud than natural, as if the presence of tubercles caused a kind of supplemental respiration in the contiguous sound lung. The breathing, however, may be rendered less distinct, or even null, if the tubercles be very much multiplied. From all these considerations it is manifest that auscultation furnishes no decisive means of ascertaining the presence of tubercles. If a great portion of pulmonary tissue becomes indurated, the inspired air only passes through the larger bronchial tubes, and then makes a loud noise, which is termed *bronchial* respiration. It is called *cavernous* respiration when the air passes freely from the larger bronchia into an excavation. The noise then resembles the blowing into an empty bottle, and has been called by Laennec the *amphoric* respiration.

The natural respiratory murmur is obscured, in many cases of tubercular phthisis, by different wheezing noises or rattles, which sometimes mask it entirely. These rattles exist in the bronchia or in the excavations—their numerous varieties depending chiefly on the quantity or quality of the matters contained in those parts—on the diameters of the cavities, their mode of communication with the bronchia, and the condition of the cavernous parietes. For minute information on these points, (which we do not, however, consider as of very great importance,) we must refer to the great work of Laennec.

When the PECTORILOQUY is *unequivocally* heard, there can be no doubt of the existence of an excavation ; but it must be confessed that *perfect* pectoriloquism is rarely heard, even when the excavation exists, in consequence of the cavity being seldom evacuated, and several other circumstances. The absence therefore of pectoriloquism does not completely prove the absence of excavations. In general, however, the concomitant symptoms, joined to

the auscultic phenomena, leave little doubt as to the state of parts in such cases.

There are many moral as well as physical phenomena presented by the phthisical patient, which guide the experienced practitioner in forming his diagnosis and prognosis. One of the most prominent and curious, in the former class, is the constant and universal endeavour of the phthisical patient to hide, or if he cannot hide, to disguise the real symptoms of his malady. The lawyer has not more difficulty in sifting out the truth from the lips of the culprit, than has the physician in getting at a confession of the symptoms of phthisis, as far as they are to be gathered from the statements of the patient. He will often seem to anticipate your thoughts and try to baffle your conclusions! Have you any pain in either of your sides? Yes; but it is only slight rheumatism which shifts about, and is of no consequence. Can you lie better on one side than on the other? Yes; but it is, I am sure, from *habit*, that I cannot lie on my left side. Are you thinner than you were a few months ago? Yes; but it is entirely owing to the low living which my doctor prescribed. Have you any perspirations at night; No—yes; but they are owing to the heat of the room, when I have them. Please to draw in a full breath. The phthisical patient will make such a tremendous gasp, that you would suppose he was going to draw in half a bushel of air—and yet a pint of that fluid will set him coughing violently, to his great mortification, as it is his constant endeavour to suppress his cough all the time you are examining him. If there be any glairy tough expectoration holding much air, the patient will be sure to have a bason of water ready for you to try whether the matter sinks or swims, he well knowing that the latter is to take place. But if the expectoration is dense heavy pus, it will be a great chance if any water can be got in the house. In short, no General ever more carefully guarded his positions from the reconnoissances of the enemy, than will the real phthisical patient conceal all his weak points from his physician. It is extremely difficult to account for this strong propensity to deceive, on the part of the phthisical patient; but so it is, and the young practitioner is frequently thrown off his guard in such examinations. These patients are particularly apt to attribute their cough to *stomach disorder*; and the bias of medical opinion having lately taken that turn, the deception has been greatly increased.

IV. COMPLICATIONS OF PHTHISIS. It is seldom that an anatomical investigation of those who die of phthisis does not disclose other lesions of structure than pulmonary tubercles. Some of these are rare, and purely accidental—others very common, as inflammation of the parenchyma of the lungs, adhesions of the pleura, various degrees of inflammation in the larynx, digestive tube, &c. These last have been observed by M. Louis in four-fifths of the bodies he has examined. This distinguished physician, indeed, considers phthisis as a predisposing cause of gastric and intestinal inflammation. It is by no means uncommon to find a large growth of tubercles in the digestive tube of phthisical patients. In some cases, the disease appears to commence in the intestines, the lungs becoming tuberculated afterwards. Another organic lesion not unfrequently met with in phthisis, is very unaccountable—a greasy or fat state of the liver. M. Louis found this to be the case in two-thirds of the phthisical bodies that he opened. The swellings

of lymphatic glands have been commonly recognized as connected with phthisis. A general disposition to the developement of tubercles in various organs of the body, as well as in the lungs, is by no means uncommon. It is not a little curious that this almost universal tuberculation sometimes shews no symptom of such a state till death takes place, when the tubercles are unexpectedly found.

V. PROGRESS—DURATION—TERMINATION. The progress of phthisis is generally continued—but sometimes it is observed to be intermittent. Thus individuals have been seen presenting, for a time, all the symptoms of phthisis, and afterwards getting apparently well, again to relapse, and again to recover. The ordinary or medium duration of phthisis is from six months to two years. In some cases it is protracted to a much greater length of time. Bayle asserts that the disease may last 40 years, in which case it would certainly be entitled to the term "slow consumption!" Our author himself has recorded the case of a man 76 years of age, who died of phthisis, having exhibited symptoms of that disease for thirty years previously. There are, on the other hand, numerous instances where phthisis has been so acute as to run its course and terminate fatally in less than a month. Dr. Stoker, in the work at the head of this article, observes that phthisis very often appeared in the course of a few days after the termination of fever, in those who were predisposed to the disease; and that in many of such cases, "the developement and suppuration of tubercles were exceedingly rapid." "I have seen cases," says he, "in which scarcely any pulmonary symptoms existed before the occurrence of the fever, yet where death, from suppuration of tubercles in the lungs, took place so soon as eight days from the crisis." On dissection the lungs were found every where penetrated by anfractuous cavities of recent formation. In some cases death occured before any suppuration of tubercles obtained—"the symptoms being those of the highest inflammatory fever; These instances, he observes were rare, but as the affection may be considered as *acute* phthisis, he has related some cases of the complaint. Sometimes, says M. Andral, the phthisis presents the usual symptoms in these rapid courses—the rapidity being the only thing remarkable. At other times, phthisis is accompanied by very unusual symptoms. It will be found to simulate acute pneumonia, disease of the heart, common fever, with rapid emaciation, &c.

Previously to the researches of Laennec, phthisis was generally deemed fatal. But this illustrious pathologist demonstrated the possibility of cicatrization in cases of tuberculous excavations. Bayle, who was ignorant of this important fact, believed that, in the few cases of apparent cure of phthisis, the disease was merely bronchitis. Auscultation during life, and dissection after death, have proved to a certainty that the said excavations will occasionally heal. Unfortunately this cicatrization is not necessarily followed by the cure of phthisis. For this last to happen, there must be only one excavation, or one mass of tubercles in the lungs, which is rarely the case. There are no facts on record to authorise the conclusion that tubercles in the lungs can be absorbed—therefore the only chance which the patient has (and small is that chance) rests on the evacuation of the tuberculous matter, when once formed, and the healing of the cavern from whence it issued.

VI. TREATMENT OF PHTHISIS. M. Andral lays down two grand indications to pursue—FIRST, to combat the sanguineous congestion (variable in its degree of intensity) which precedes and accompanies the secretion of tuberculous matter—SECONDLY, to remove, if possible, the cause of these tubercular formations. For the fulfilment of the first indication, we have recourse to the antiphlogistic treatment, including revulsives. But it is in that early stage when tubercles are rather apprehended than proved to exist, that the antiphlogistic treatment can be safely made free with. In proportion as the tubercles become multiplied, and especially after they have begun to discharge themselves by the air-passages, we must be cautious of sanguineous emissions. "So far from being beneficial in such cases," says M. Andral, "I have ofted seen them accelerate the march of the disease." Nothing is more common, in this country, than to freely deplete, locally or generally, for pains in the chest, in cases of tubercular phthisis, by which much mischief is done. M. Andral condemns the use of setons, cauteries, moxas, and other counter-irritants, on the same principle. In the very earliest stage they may be beneficial—but at later periods, he thinks they rather increase the fever by the irritation, and thus tend to develope rather than check the tubercular secretion.

In the *complications* of phthisis, the treatment must be adapted to the nature of the complication. Thus when actual inflammation of the parenchymatous structure of the luugs, or of the bronchial mucous membrane of the pleura obtains, we must deplete, be the consequences what they may, otherwise disorganization will be rapidly promoted. The strong tendency to inflammation and ulceration of the stomach and bowels, in phthisical patients, should make us cautious in exhibiting tonics and stimulants, in the progress of the disease. M. Andral, indeed, is a violent opposer of tonics in any stage of phthisis; but in this indiscriminate censure we cannot concur. When excavations have occurred, and there is no inflammatory action in the vicinity of these excavations, it is surely reasonable to exhibit nourishing food and tonics, to enable the constitution to cicatrize the cavern. In scrofulous abscesses externally (and the connexion between scrofula and tubercles is strong) we would pursue this course—and we would do the same in cases of pulmonary tuberculation. Besides, the nocturnal perspirations, which so rapidly waste the strength of the patient, are materially checked by the quinine and acids, when judiciously administered. At the same time we are aware of the necessity for a vigilant watch over the symptoms, lest an inflammatory focus be established in some part by the tonics. Neither are we to omit the use of narcotics in moderating the cough. The very succussions of the cough must tend to injure weak lungs, and therefore it is desirable to control it, except when necessary to evacuate the expectoration.

"We see," says M. Andral, "from these facts, how very limited is the therapeutic art in pulmonary phthisis. In a few cases, we can prevent the developement of tubercles, or retard their progress. We have no proof that phthisis was ever cured by art. The cicatrization of tuberculous excavations is the work of Nature, in which work she may perhaps be somewhat assisted—or at least not molested in the salutary process. For ages we have been searching after remedies that might combat the disposition to tubercles or remove them when formed—and innumerable specifics have been

employed and abandoned in their turn. If I may be permitted to express my opinion, I would say, that this want of success hitherto, forms no good reason for abandoning the pursuit. Among the remedies which have failed, there may some be found, on new and careful trials to succeed—and we should also experiment with medicinal substances that have not been hitherto employed in this complaint. If the influence of iodine in removing morbid growths of the thyroid gland be demonstrated, which is the case, it is impossible to deny that other medicinal substances may be found capable of modifying other morbid growths or secretions."

In this sentiment which is equally remote from cheerless scepticism and empyrical presumption, we cordially agree with the enlightened author.*

"Air and regimen," says he, "merit great attention in the treatment of phthisis. But what air, what regimen is the best? Here again, physicians are far from being of one sentiment. The air of mountains, of forests, and of the sea, &c. has each in its turn, been praised as beneficial to the consumptive. It appears to me that a *mild temperature* or climate possesses all the advantages which can be reasonably expected from atmospheric influence. Sudden or great aerial vicissitudes—in short, every state or quality of the atmosphere which tends to induce pulmonary congestion, whether acute or chronic, must be injurious to the individual disposed to, or affected with tubercles. To prevent or modify this tubercular disposition, the consumptive have been ordered to breathe air charged with balsamic, resinous, ætherial, sulphureous, and other medicinal substances—as well as with different gases, as oxygen, hydrogen, carbon, &c. Stables, shambles, coal-pits, fens, have been selected as domiciles for the phthisical invalid, but with what success it is not for me to say."

How many volumes have been written on the localities best suited to consumptive patients!! Madeira, Lisbon, Nice, Italy, have annually received their melancholy quota of spectres from the shores of Great Britain—never to return!

Nulla vestigia retro!

While HASTINGS, PENZANCE, the Mendip Hills, and some other places have proved the more humble, but perhaps not less salutary domiciles of those who could not afford a more expensive journey or voyage to more brilliant skies.†

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* There is every reason to believe, from the experiments and statements of Dr. Baron, that iodine itself has a considerable influence in causing the absorption of internal tubercles. We are justified, according to M. Andral's principle, in making more trials with this substance, even before we have recourse to new means.—*Rev.*

† In a little work which now lies before us from the pen of Dr. Myddleton, who appears to have suffered much in his own family from consumption, we find the following passage:

"I have consulted various statistical records, to enable me to ascertain and select the most sanative temporary retreat for consumptive patients, at all seasons of the year, more especially during the cold months; embracing,

"1st. A dry atmosphere of mild temperature, REMOTE FROM THE SEA-SHORE.
"2dly. Complete shelter from the North and North-East winds.
"3dly. Commodious accommodations for visitors.

For our own parts, we are disposed to attach little or no reliance on foreign and southern climates in the cure of tubercles. That a warm and steady atmosphere is useful in preventing or retarding the developement of tubercles, there can be little doubt; but we believe there is no proof that warm climates have cured the disease after the tubercles began to soften down. But the very climates in question, are only serviceable during the Winter and Spring months. Those who go to Italy or Nice must leave them in the Summer and Autumn, and sojourn in Switzerland or some Cisalpine situation. The inconvenience and expense of thus migrating from clime to clime are very great, and probably the chapter of accidents in catching colds, during these migrations, is a full set-off against the benefits derived from climate. On all these accounts, we prefer the southern part of England, with English comforts, to the chance of amelioration in warmer regions of the earth.*

"4thly. Rational and polished society, so conducive in soothing the mind under corporeal suffering.

"These requisites, I have met with at the city of WELLS, on the south side of the Mendip Hills in the county of Somerset, 20 miles west of Bath. It is not only the most eligible situation (to which my researches have led) in the United Kingdom, but it would seem greatly preferable to the South of France, or Italy, Lisbon, or Madeira; for the temperature of those climates is MUCH TOO HIGH, during the summer months, to admit of necessary exercise, independently of being extremely oppressive to pulmonary patients. without any reference to the attendant inconveniences of such removal to invalids, or the painful separation from friends, and the comforts of a native domestic circle; and that too, without deriving any sanative advantage whatever, from such change of country, which fatal experience has so often lamentably confirmed."

* The Editor of this Journal, during a recent tour through Italy, directed his attention very particularly to the medical topography and climate of those places to which invalids are sent from this country. The more he investigated the subject the more he was convinced that medical men who send patients, with pulmonary affections, to Italy and the South of France, have a great deal to answer for, if there be retributive justice in another world! Leaving out of the question the passage over the Alps, in Autumn, when atmospheric vicissitudes are abrupt, and the season uncertain, where is the invalid to pitch his tent for the Winter?—Florence is so near the Appenines, that it would be death for a phthisical patient to encounter the tramontane blasts from their snow-clad summits. Even at Naples, you are alternately choaked with the Sirocco from the South, and frozen by the chilling winds from the North. Dr. Johnson went round the *male* wards of the Hospital at Naples (INCURABLES) in company with Mr. Potter, an intelligent English surgeon there, and they counted 84 cases of PHTHISIS in the wards! Allowing that there was an equal number among the females (whom they were not permitted to visit) the sum total would be 168 phthisical cases in a single hospital, not containing more than twelve or fourteen hundred patients! In the great Hospital at Milan, which Dr. J. carefully examined for several days in succession, the proportion of pulmonary and tracheal affections was terrific, and that in the beginning of October, when the Autumn was in its zenith. ROME, from the comparative tranquillity of its atmosphere, the melancholy stillness which reigns over its deserted and pestiferous campagna,

"A weary waste expanding to the skies"—

its distance from the higher ranges of the Appenines, its moderate proximity to the Mediterranean, and other circumstances, is, no doubt, much preferable to Florence or Naples

The talented author of the article which we have thus analysed, has overlooked some interesting points, respecting tubercular phthisis, which deserve notice. One of these is, the *communicability* of the disease from one individual to another. Leaving out of the question the popular belief in the contagious character of phthisis entertained in many countries, especially in Italy, we may be permitted to remark that several facts have come within the scope of our observation during the last ten or fifteen years, which convince us that the disorder may be communicated by the breath. We are aware of the difficulty, or even the impossibility of proving this position, beyond the power of cavil—we merely state our own conviction, leaving it for our brethren to conclude according to their own experience. We shall here introduce a passage from Dr. Myddleton's work, in corroboration of what we have advanced.

"That Pulmonary Consumption, derived from hereditary taint can be communicated to persons who are not predisposed to that hitherto ungovernable disease, I have had innumerable unequivocal examples, from attentive observation, with ample opportunities, for more than forty years; but that lamentable occurrence, my experience also teaches me to believe, most confidently, never obtains unless by *direct exposure to the patient's expirations when open ulcers actually exist* in one or both lobes of the lungs, manifested by the expectoration of *pus*. The seeds of the disease are thus sown in the pulmonary organs; tubercles are thence generated in the parenchyma or cellular substance of the lungs by absorption."

Dr. M. goes on to state a considerable number of instances where sleeping in the same bed with, and inhaling the breath of phthisical patients, apparently, and we have no doubt really, induced the disease. But whatever doubt may be thrown on this point, we would advise our professional brethren, for the sake of humanity, to caution those who are well, against sleeping in the same bed or room (if it can be avoided) with those who are affected with phthisis, in an advanced stage.

Before concluding this article, we shall just advert to a remedial process strongly advocated by Dr. Myddleton—the direct application of medicinal substances, in the form of impalpable powder, to the lungs themselves—and particularly to the excavations formed by evacuated tubercles. These medicinal substances are, cinchona, myrrh, zinc, and frankincense, introduced my means of an inhaler. The factitious airs applied to the lungs in this way,

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for pulmonary invalids. But from an unbiassed examination of its medical topography, Dr J. is convinced that, to migrate from the comforts of an English fire-side, and the mild climate of the southern coast of Great Britain, to the cheerless abodes and depressing atmosphere of Rome, is little less than suicidal madness on the part of the patient, and culpable ignorance on the part of the physician who lends his sanction to such a step.

PISA and NICE appeared to Dr. Johnson as the least exceptionable of the transalpine and cisalpine spots, where phthisical invalids might pass the depth of Winter and the early months of Spring. But the good to be derived from such a residence is a very problematical equivalent to the perils attendant on the journey thither late in Autumn, and the return from thence before the heat of Summer. Dr. J. intends to take a more enlarged view of the subject very soon, and will then have an opportunity of developing his ideas more fully.

by Dr. Beddoes and his followers—and more recently, the application of tar-vapour by Sir Alexander Crichton, have failed of success; and therefore we place no great reliance on the measure employed by Dr. Myddleton. If, indeed, these medicinal agents, which are all stimulants, could be conveyed to the internal surface of an excavation, without touching on any sound part of lung, we think it very probable that a new and salutary action might be occasionally induced in the parietes of said cavity; but unfortunately not one-twentieth part of any substance introduced by inhalation can be expected to reach the morbid structure—the whole of the remainder being left in contact with the mucous membrane or the air-cells (if a powdery substance reached them) of sound parts. All reasoning would lead us to conclude that such a process would tend to irritate the lungs, and thus keep up an afflux of blood to the seat of disease. That such a process would be detrimental in the long run, we can have little doubt—and our experience of the effects of tar-vapour corroborates this opinion. Dr. M. insists on the fact, proved by various experiments, that the lungs rapidly absorb substances introduced into them; but we do not see that this alters the case for the better.

We have now brought to a close this exposé of our present state of knowledge respecting pulmonary tubercles. It only wants a plentiful interstitial deposit of *words*, and *cases* to transmute it into a goodly octavo volume, when any young candidate for fame chooses to become author.

XII.

A TREATISE ON NEURALGIC DISEASES DEPENDENT UPON IRRITATION OF THE SPINAL MARROW AND GANGLIA OF THE SYMPATHETIC NERVE. By *T. Pridgin Teale*, &c. pp. 117. 1829.

The influence of the spinal marrow upon a state of health or of disease is abundantly testified by the many and disastrous ailments which follow its derangement. But the precise nature of this influence has not been determined with sufficient certainty, the full extent of its results has not been fairly measured, and a thousand symptoms are every day ascribed to nervous irritation, without affixing to this ascription any practical import, or giving to the derangement which it is employed to designate any precise habitation. If pains be felt in the parietes of the chest, or integuments of the shoulders they are ascribed to rheumatism; if seated in the head they are denominated "*sick headache*;" if we be oppressed with ennui it is because we are *bilous*; if tortured with convulsions, then we are *nervous*. Cramp is explained when it is called colic; tremors when we are said to be irritable. The nervous system sympathises with some gastric disturbance if we complain of *tic*, and a few unmeaning vocables, as *nervous*, *bilious*, and *hysterical* are sufficient to supply us in all such affections with appropriate and abundant nomenclature.

But however unsatisfactory and ill-defined our knowledge of spinal ma-

ladies has hitherto been, the ganglionic system presents a subject of a still darker nature. The very origin of the sympathetic nerve was long unknown, if it be even yet universally agreed upon; and its functions and diseases are still placed by many in the *terra incognita* of the map of human knowledge. One considers it the grand conductor by which a thousand sympathies are created and preserved; another asserts that its ganglia may be torn, or dissected out without the animal betraying any consciousness of injury; and some go so far as to deny that it is a nerve at all. It was the opinion of Winslow that the sympathetic ganglia are reservoirs of nervous power;—of Johnstone, that they are the instruments by which the heart and intestines are endowed with involuntary agency; of Bichat, that they are so many centres of organic life, *centres particulieres de la vie organique*, independent both of the brain and spinal marrow. These are only a meagre specimen of the many contradictory conjectures which have been hazarded upon the nature of a system, a part of which only Wrisberg called the *cerebrum abdominale*; and as to its pathology nothing was precisely known until within the last few years, when a more philosophical mode of studying such matters elicited more light, and when the valuable works of Soemmering, Scarpa, Philip, Hastings, and Lobstein enabled us to speak with more satisfaction upon the natural and morbid influence of the ganglionic system.

In the present little volume Mr. Teale has done much to rescue these interesting portions of the nervous system out of their obscurity; to give a precise meaning to terms which were as extensively employed as they were utterly unintelligble; to trace many wandering and anomalous symptoms to their proper source; to ascertain the character of that morbific cause on whose existence they depend; and to prescribe the treatment which is best adapted for their removal. By an attentive investigation of his subject he has certainly settled one most practical question—that disease of the spinal cord and sympathetic ganglia is often less strikingly evinced by symptoms exhibited in its immediate neighbourhood, than by such as may be discovered in distant parts; and by linking the seat with the symptoms of disease, he has given a clue to their treatment as well as to their etiology, which we have good reason to believe will frequently lead to their alleviation, when it fails to reach their cure.

IRRITATION OF THE SPINAL MARROW.—In vindication of his view that an irritable state of the spinal marrow frequently occasions neuralgic affections in distant parts, the author furnishes nothing which can be called incontrovertible evidence; but the presumption which he establishes in its favour must be considered strong, where it proves not satisfactory. The frequent coincidence of tenderness in the spinal column with these neuralgic symptoms, the relief or aggravation of these symptoms as this tenderness diminished or increased, the obvious influence which treatment directed to the spine exerted upon the immediate seat of neuralgic disease, and the well ascertained pathological fact that some of the most marked effects of disease of the brain and spinal cord are discoverable, neither in the substance or vicinity of the disease, but in organs at a distance from the seat of action;—these are the leading considerations whereon the author rests his views, and it must be admitted that they are more than plausible. Dissection would certainly give more direct proof, but in the present stage of this in-

quiry it is not forthcoming, and until more extensive opportunities for investigation shall furnish autopsic light, we can only weigh with caution the evidence we possess and square our inferences with the extent of our information. If a person complain of darting pains in the intercostal spaces between the fourth and seventh ribs of the right side, if these spaces be tender under pressure, and if the intercostal muscles occupying them be occasionally affected with spasm, if a dull sense of heat and uneasiness be felt in the third and fourth dorsal vertebræ, if the pains of the chest appear to shoot from and to these vertebræ, and if on examining the spine this portion of it alone betray decided tenderness on pressure; if cupping, leeching, and blistering this portion of the spine be followed with marked alleviation of every symptom, and if with the removal of the spinal tenderness every indication of thoracic disturbance disappear, it is as certain as circumstantial evidence can make it, that there is some etiological relation between the tenderness of the spine and the pain in the chest, and that although we may not have the sanction of actual sight to fix the nature of this relationship, there can be as little practical as pathological hazard, in concluding that the seat of disease is principally, if not exclusively confined to the spinal column.

The same evidence which lights us to this conclusion will aid in discovering the nature of this disease. When the symptoms which attend it are compared with such as depend on acute inflammation of the spinal cord, they will be found to differ less in nature than degree. The introductory symptoms of both diseases are nearly, if not precisely the same, the sensibility of the skin is not destroyed, but impaired, the muscles are not palsied, but seized with feebleness and tremors. In the absence of better proof from the author, we refer to some of Dr. Abercrombie's cases, as given in his valuable work upon diseases of the brain. In his CXIth. case the patient complained of pain in different portions of the spine stretching round the abdomen, a very uneasy sense of tightness across the lower part of the chest, spasm of the abdominal and dorsal muscles, coldness and numbness along the sides of the chest, abdomen, and down the lower extremities, diminished power of motion and occasional hiccup. These symptoms gradually increasing the right arm became paralytic, his speech impaired, coma came on, and he died. Upon dissection the whole cord was found of a pale colour and in a state of complete ramollissement, a part of the medulla oblongata, cerebellum and brain was similarly diseased.

The tenderness of the spine at that part which the nervous symptoms would indicate as the seat of mischief, is strongly corroborative of its inflammatory nature, and the treatment, which is found to remove it with the greatest certainty, being purely antiphlogistic, inculcates the same inference. As the inflammation is subacute and seated in organs of great delicacy, dissection itself might often fail to give much additional force to these circumstantial evidences; for as the author justly says—

"Although the parts after death may not exhibit any traces of inflammation, we are not warranted in concluding that they have not recently been the seat of disease. When the conjunctiva has been intensely injected from inflammation, or the skin the seat of redness from erysipelas, how slight are the traces of inflammation after death! And if the conjunctiva and the skin may be intensely red from acute inflammation, and yet exhibit scarcely any traces of disease after death, it is more than probable that the spinal marrow should be equally destitute of the marks of disease. Indeed, it would even be a subject for

surprise if any permanent changes in this structure had been effected, since the diseases in question are presumed only to consist in the lighter shades of inflammation, seldom attaining those violent degrees of intensity which are attended with obvious disorganization." 68.

The symptoms produced will vary both in nature and extent with the portion of spine affected. If the upper cervical portion be diseased, neuralgia of the scalp is not uncommon, and the direction of the pain is generally determined by the position of the nerve. Sometimes the pain is dull, frequently it is acute, or it may occur in paroxysms. Occasionally some stiffness of neck accompanies the other symptoms, the voice may lose its natural tones, or speaking may be attended with difficulty.

A healthy youth was attacked (on the 10th of August, 1829,) with giddiness and pain of occiput, which frequently darted across the crown to the forehead. This pain, although generally dull, was often acute, and a feeling of weariness was complained of about the shoulders. These symptoms assumed the form of paroxysms, which were most frequent in the morning, and continued about two hours; they had been gradually increasing for several weeks, and they were accompanied with tenderness of the third and fourth cervical vertebræ. Leeches to be applied to the tender part of the spine. 14th. Pains return at the usual time, but in a very mitigated form, the vertigo is less and the patient is much better in every respect; blister to neck. 18th. Vertigo and pain quite gone, and no tenderness of spine was now elicited on pressure.

It may be thought that had the leeches and blister been applied in this case to the head, the relief might have proved as sudden and effectual. The following case will be a sufficient reply to this suspicion.

Mrs. B. a week after her confinement, complained very much in the afternoon with a dull aching pain in the occiput, which extended along the parietal bones to the temples, and transversely towards the cheeks along the lower jaw. She also complained of a violent pulsation and distressing sound in the head, which she compared to the "beating of hammers." These symptoms had somewhat annoyed her previously to her confinement, and leeches had been applied to the temples but with the effect of aggravating them during the two following days. On examining the spine very great tenderness of the two upper cervical vertebræ was detected, a circumstance that had been hitherto overlooked, leeches were applied, immediate relief was procured, and the paroxysms never afterwards returned.

When the inferior cervical division of the spinal marrow is the part diseased, pains are felt in the arms, shoulders and breasts. Sometimes they follow the course of the anterior thoracic branches of the brachial plexus, occasionally they are fixed in the neighbourhood of the shoulder joint, and again they shoot along the cutaneous nerves. The mammæ not unfrequently become acutely sensible, and, if the affection have continued long, feel knotty and irregular; pricking, numbness, and a sense of cold are often felt in the arms, the elbows are stiff, the muscles are affected with cramps and spasms, the wrists are weak, the hands tremble and the fingers are almost insensible to such objects as they may contain. Females of retired and sedentary habits are obnoxious to these neuralgic symptoms in the upper ex-

tremities, and their modes of life have been generally considered a sufficient explanation.

Mrs. B. aged 53, mother of a large family, had been much addicted to rheumatism for the greater part of her life, and on the 10th of December, 1827, made considerable complaint of a fixed pain in the neck and between the shoulders, of darting pains over the occiput, of aching pains over the entire arms, of prickling sensations of the hand and numbness of the fingers. Abdominal muscles occasionally painful, lower extremities free, no fever, no cough, nor dyspnœa. Her disease, having been considered rheumatism, had been treated with the ordinary remedies but without much benefit, and finding that the two lower cervical and six superior vertebræ of the back betrayed tenderness when pressed, leeches were applied and a blister was ordered for the next evening. The irritation occasioned by the blister was very great, and while it continued the original symptoms were more severe; but as it subsided they gradually disappeared, and on the 29th of December she was not only free from pain, but felt a degree of muscular energy in her arms which she had not enjoyed for several years.

The sixth case will remind our readers of Sir A. Cooper's description of the "irritable breast," and we cannot impress the importance of such cases upon them more forcibly than by observing, that not a few have been doomed in consequence of similar symptoms to severe and fatal operations, and that many are permitted to wither under the blighting suspicion that they are the victims of some malignant malady, which can only be appeased with the sacrifice of life. An unmarried lady, aged 30, consulted the author on the 28th of August, 1828, for a painful affection of the right breast, which had annoyed her for several years, particularly at the menstrual period, but which had increased within the last four weeks to a degree of alarming intensity. When examined it appeared enlarged and irregular, and the slightest touch produced acute suffering. "Sharp darting pains" often shot across the breast into the right arm, which was slightly tumefied and felt weak, a constant gnawing sensation in the shoulder, arm and breast was complained of, and when the tips of the fingers were suddenly touched pain darted up the arm to the neck and head, and down to the breast. Pressure over the fourth cervical and three upper dorsal vertebræ gave great uneasiness. Excepting occasional dyspeptic fits and an habitual torpidity of bowels the general health was tolerably good; eight leeches to the tender vertebræ and a purgative of salts and senna. (12th.) Bowels well opened, pain easier; blister spine. (30th.) Irritation of blister has occasioned some fever, and produced a bad night, pain unchanged; an effervescing draught every four hours. (Sept. 3d.) Irritation from blister has subsided, breast less swollen and bears pressure without pain, arm can be moved with greater ease. (10th.) Pains have returned; blister spine. (17th.) Breast of natural size, pains quite gone, arm can be moved with considerable facility. (Aug. 26th, 1829.) Breast continues well, and, with the exception of an occasional feeling of numbness and weakness in the right arm, she is quite well.

If the upper part of the dorsal spine be affected symptoms similar to those now described are produced, together with a fixed pain in some part of the intercostal muscles, or pleurodynia; when the lower half is tender an op-

pressive sense of tightness across the epigastre, soreness along the costal cartilages, or in the course of the diaphragm, and pains in the abdominal and lumbar muscles are the most distinguishing phenomena.

On the 1st of January, 1828, Mr. H. aged 40, who had been in an unhealthy state for several months, complained of a fixed pain in the intercostal spaces between the third and seventh ribs of the right side of the chest, which was increased by deep inspiration. Besides this fixed uneasiness there were acute pains which darted from the spine across the chest and towards the shoulders, and sometimes to the scalp. These pains recurred at short intervals through the day, and were less frequent in the night, tongue furred, appetite defective, occasional flatulence, frequent dry cough, considerable emaciation. Bowels regular, pulse natural. Having suffered for ten years from pain in the side he was considered to be labouring under phthisis; he had received much medical attention without improvement, and leeches and blisters had been applied in vain to the painful part. On examining the spine the third and fourth dorsal vertebræ betrayed very considerable tokens of morbid sensibility, and when the attention of the patient was drawn to this circumstance it occurred to him, that this part had often been the seat of uneasiness and unusual heat, and that the "darting pain in the chest appeared to strike to and from that part." From the first to the 25th of January dry cupping and leeching were twice employed, a blister was thrice and a sinapism once applied with decided relief; after the 25th a liniment containing oil of turpentine kept the integuments covering the tender vertebræ in a state of irritation, an effervescing draught was occasionally given to allay thirst, some rhubarb to keep the bowels open and sulphate of quinine to improve appetite and restore strength; and upon the 30th of February he considered himself perfectly recovered. If the lumbar or sacral part of the spinal column be affected the scrotum and neighbouring part often feel sore, the lower extremities are attacked with spasms, tremors and other morbid sensations, the knees totter and a sense of feebleness is complained of.

Mr. B. aged 20, complained of "pains across the body, weakness in the lower extremities, and soreness in the thighs" for the last three weeks. The abdominal pain is fixed, the soreness of the thighs descends along their interior over the knees to the broad surface of the tibiæ, his legs totter and he frequently feels a tendency to fall. Stomach in good health, and he seems free from any internal disease. In consequence of finding that the second and third lumbar vertebræ were tender ten leeches were applied, and a dose of oil was given. Five days afterwards the soreness and weakness of thighs and legs were removed, and the abdominal pain, which was much diminished, entirely disappeared on the application of a blister to the back.

An attentive perusal of the cases now extracted will enable the reader to form his own opinion as to the connexion between tenderness of the spine and such neuralgic symptoms. In some of them this connexion was obvious and easily traced by the character of the symptoms alone; in others it was strikingly presumptive from the nature and result of the treatment, and in all when the symptoms and treatment are viewed together, there can be little room for doubting that some morbid action within the spinal column was the principal source of every symptom. Mr. Teale calls this morbid action "irritation," and refers to the spinal marrow as its seat; but irritation is a

vague and unmeaning epithet, which is better adapted to conceal ignorance than convey information, and the phenomena described in the above cases are indicative of inflammation. The acute and darting pains, the increase of heat, the occasional redness and even tumefaction, and the alleviation of all these symptoms by leeching, cupping, blistering and aperients, are strongly favourable to this opinion. In justice to the author, however, it must be noticed that while he has chosen to call this spinal disease *irritation* he affixes to the term, according to the French fashion, the idea of *subacute inflammation*; declining to use any stronger phrase until dissection had cast more light upon its pathology.

"This irritation, or subacute inflammatory state of the spinal marrow is not necessarily connected with any deformity of the spine, or disease in the vertebræ. It may co-exist with these as well as with any other diseases, but it so repeatedly occurs without them, that they cannot be regarded as dependant upon each other. Where, however, inflammation and ulceration of the vertebræ or inter-vertebral cartilages exist, it is probable they may predispose to, and, in some instances, act as an exciting cause of an inflammatory state of the nervous structures which they contain; for we not unfrequently find inflammatory affections of the vertebræ in conjunction with symptoms of irritation of the spinal marrow. But these two affections, although co-existing, bear no regular relation to each other; and during the progress of the vertebral disease, the affection of the nervous structures is subject to great changes and fluctuations. The local remedies employed for arresting the disease in the bones, often alleviate the affection of the spinal marrow at the very commencement of the treatment, long before the vertebral disease is suspended; but as the neighbouring inflammation in the bones appears to predispose or excite the nervous mass which they contain, to disease, relapses of the nervous affections are repeatedly occurring during the whole course of the complaint.

"The affections of the spine, termed lateral curvature and excurvation, appear to have no necessary connexion with the disease which I have been describing; and the proportion of cases in which they are found united, is so small, that lateral curvature can scarcely be considered even as predisposing to this disease. The most extreme degrees of deformity frequently are observed without any affection of the nerves; and when lateral curvature does occasionally co-exist, local antiphlogistic treatment will often speedily remove the nervous symptoms, whilst the curvature remains unrelieved. Hence there is an impropriety in considering these nervous symptoms as a result of the deformity, and in explaining them upon the mechanical principle of pressure and stretching, to which the nerves are supposed to be subjected as they issue from the intervertebral foramina. If the pressure and stretching produced by the curvature, were the cause of the nervous symptoms, they ought to continue as long as the deformity remains.

"Symptoms of affection of the brain frequently occur in conjuction with these diseases of the spinal marrow. These however must be regarded as the result of extension of disease from one part to the other, most probably through the medium of the membranes. I shall, however, purposely avoid touching upon these subjects, as it would be foreign to my present purpose to enter upon the discussion of cerebral neuralgiæ.

"*Treatment.*—When the different neuralgic symptoms which have been enumerated, can be traced to this morbid state of some portion of the spinal marrow, the treatment that ought to be pursued, is readily decided upon. Local depletion by leeches or cupping, and counter irritation by blisters to the affected portion of the spine, are the principal remedies. A great number of cases will frequently yield to the single application of any of these means. Some cases, which have even existed several months, I have seen perfectly re-

lieved by the single application of a blister to the spine, although the local pains have been ineffectually treated by a variety of remedies, for a great length of time. A repetition of the local depletion and blistering is however often necessary after the lapse of a few days, and sometimes is required at intervals for a considerable length of time. In a few very obstinate cases issues or setons have been thought necessary; and where the disease has been very unyielding, a mild mercurial course has appeared beneficial.

"It is of course necessary that proper attention be paid to the regular functions of the bowels, and to the treatment, by appropriate means, of any other affection which may co-exist. It is needless, in this form of disease, to offer any directions respecting diet, as the judgment of every medical man will enable him to decide best on the general management of the case immediately under his notice.

"When my attention was first directed to this subject, I considered recumbency a necessary part of the treatment; it is, for a moderate length of time, undoubtedly beneficial, and frequently very much accelerates recovery; but subsequent observation has convinced me that it is by no means essential. I have seen several instances of the most severe forms of these complaints, occurring in the poorer classes of society, where continued recumbency was impracticable, which have, nevertheless, yielded without difficulty to the other means of the treatment, whilst the individuals were pursuing their laborious avocations.

"These observations, however, are not intended to apply to those cases in which there is actual disease of the vertebræ.

"When there exists a tendency to relapse, I have thought it advantageous to continue the use of some stimulating liniment to the spine for a few weeks after the other means of treatment have been discontinued. A liniment, consisting of one part of spirit of turpentine, and two of olive oil, is what has generally been employed. 21.

IRRITATION OF THE SYMPATHETIC GANGLIA. In the diseases which have been described the source of mischief lay in the spinal cord, and the effects of this mischief were extended to distant organs through the interposition of the spinal nerves; but those, upon which we are now entering, are said to originate in another source, and in place of arising from the spinal marrow are supposed to depend upon derangement of the ganglia of the sympathetic nerve. Upon first casting our eye upon the title page of this work, and seeing by it that the writer proposed to describe and treat diseases depending on the spinal marrow, and communicated by the cerebro-spinal nerves, apart from such as arose from the sympathetic ganglia, and were communicated by the nervous filaments derived from them, we admit that the proposal appeared to us little better than a vain refinement; but upon more mature deliberation we believe that the distinction herein established has a natural foundation. While this is granted, however, it must be evident that any distinction based upon such a difference must be purely nosological, and that it can have no influence upon the selection, or employment of our remedial plan.

"As the disease may be confined to one part of the spinal marrow, or may exist simultaneously in different portions, or may even pervade its whole extent, so the affection of the ganglia may be confined to one of these nervous masses, may exist in several which are contiguous, or in ganglia remote from each other; and, as there is reason to believe, the whole chain may occasionally be affected.

"The disease of the ganglia is seldom found, except in conjunction with that of the corresponding portion of the spinal marrow, whereas the spinal marrow is often affected without the neighbouring ganglia being under the influence of disease. Thus we frequently

find symptoms of disease in a portion of the spinal marrow without any evidence of its existence in the corresponding ganglia, frequently the symptoms of both combined, and occasionally, but rarely, symptoms referable to the ganglia, without the spinal marrow being implicated." 39.

The principal symptoms of an irritated state of the sympathetic ganglia are palpitations of the heart, asthmatic breathing, spasm of the stomach, neuralgic pains of the thoracic and abdominal viscera, and diseased secretions of the stomach, liver, and kidneys. Leucorrhœa is often attendant on these affections, but whether it be a coincidence or consequence the author finds it difficult to explain. Pyrosis he considers a neuralgic disease, and he is inclined to suspect that some forms of diabetes may partake of the same character.

The facts and arguments which were formerly employed to show that the disease of the spinal cord, which gives rise to neuralgia, was inflammatory, we now refer to as illustrative of the same point in the cases of the sympathetic ganglia. Among two or three other cases Lobstein gives the history of a boy only ten years old, who died with symptoms of anxiety, oppression in the chest, and rattling at the pit of the stomach, in consequence of a repelled eruption, and in whom the trunk of the sympathetic nerve, the ninth and tenth thoracic ganglia, and two of the anastomosing branches were found upon dissection *profunde inflammata.* He has also seen the sympathetic destroyed *per ulcera et cariem*, but does not give the symptoms which occurred during life, and hypochondria, hysteria, melancholia, colica pictonum, angina pectoris, febris intermittens, are only a tythe of the diseases which he describes as depending upon its derangement. Any of the sympathetic ganglia may be affected, but the middle and lower thoracic ganglia are those which are most frequently disordered, and the ganglia of the neck are affected next in frequency. As the stomach is chiefly supplied by the former and the heart by the latter, these organs, it may be supposed, should be first affected; and hence do we find that the symptoms above enumerated are generally referrible to these viscera. So far, therefore, do the symptoms illustrate the parts affected; but the stomach is not exclusively supplied by the sympathetic filaments of the thoracic ganglia, nor is the nervous energy of the heart limited to those of the neck. These organs derive nervous power from the cerebro-spinal system by means of the pneumogastric nerve, and from the sympathetic system through filaments sent off from the ganglia, and the question naturally arises, may not both of these sources of nervous influence be tainted, and may not their taint conjointly produce that disordered state of the stomach, heart, and lungs which we have just described?

"The prosecution of this part of the subject will be best facilitated by investigating the following queries.

"1. Is the muscular action of the heart, arteries, stomach, and intestines, dependent upon the cerebro-spinal, or upon the sympathetic system?

"2. Are painful affections of the heart, lungs, stomach, and intestines, seated in the filaments of the pneumo-gastric, or of the sympathetic nerves?

"3. Is the pneumo-gastric nerve the *only* nervous agent in digestion, or do the nerves of the sympathetic system exert any considerable influence in the digestive process?" 57.

The first of these questions few enlightened physiologists of the present

day can find much difficulty in solving. The well-known and frequently recorded fact, that full grown fœtusses have been born without either brain, or spinal marrow, and the experiments of Le Gallois, Clift, and W. Philip, in which the whole spinal marrow and brain were destroyed without affecting in any very appreciable degree the action of the stomach and intestines, or even of the heart so long as respiration was continued, are quite conclusive as to the immediate independence, at least, of the muscular agency of the heart and stomach upon the cerebro-spinal system; and the objections which have been drawn against this view from the influence of mental emotion and from the changes wrought upon the pulse by the application of stimulants and sedatives to the brain and spinal marrow, must be regarded after the experiments above alluded to of very inferior weight.

But the two remaining queries are more difficult of solution, and very distinguished writers may be found the advocates of both sides. Desportes believed that painful affections in the heart and lungs depended on the pneumo-gastric nerve; Mr. Broughton asserted that this nerve was insensible, and Laennec imagined that the filaments of the sympathetic, as well as those of the pneumo-gastric, might be obnoxious to disease and might indiscriminately constitute the seat of pain. The portio dura of the seventh pair, the author observes, is very strikingly like the pneumo-gastric nerve in several important particulars. They arise by a single set of fibrils from a distinct part of the spinal marrow, in contradistinction to the fifth pair and the spinal nerves which communicate sensibility; in many animals they are connected towards their origin; in birds they arise together, and in fishes the substitute for the portio dura is a branch of the eighth pair. These anatomical features of resemblance create a probability that the functions of these nerves are very much alike, and as the experiments of Mr. Bell have clearly ascertained that the portio dura may be touched, stimulated and even cut without pain, Mr. Teale presumes that the pneumo-gastric nerve is equally insensible, and that, therefore, it cannot be the seat of pain. The following experiments of Mr. Broughton, upon the par vagum of a horse, abundantly confirm the justice of this presumption.

"The par vagum was exposed in the neck on one side, and insulated from its cellular connexions, but carefully retained in its place. It was repeatedly transfixed with a pin, pinched, and slowly cut through with scissors, and not the slightest degree of sensation was manifested. When pulled out from its natural position, or squeezed by the forceps, the animal appeared to wheeze as in obstructed respiration, but exhibited nothing like the twitches and startings which peculiarly mark the production of pain in irritating sensible nerves." 62.

The well known experiments of Drs. Philip and Hastings have demonstrated the importance of the eighth pair of nerves in the function of digestion; but Le Gallois, from similar experiments, concluded that digestion is not invariably suspended by their division: Magendie and others have shown that, after these nerves are cut above the cardiac orifice of the stomach, digestion still proceded, and it is not to be denied that many animals, which are destitute of the eight pair, can digest the coarsest nutriment with perfect ease. These circumstances prove that, although the par vagum is materially concerned in the digestive function, yet digestion can proceed without them, and since the sympathetic is the only other source of nervous supply

this nerve must have some community of office with the eighth pair. Besides, it has been shown, while considering the first question, that the muscular action of the stomach is dependent upon the sympathetic, and if this muscular action become deranged in consequence of disease in this nerve, the food cannot be removed by the action of the stomach as it is digested, and dyspeptic symptoms will result as certainly as if the gastric secretions had been disordered or deficient. It even appears probable to the author that the secretions themselves occasionally become diseased when the sympathetic is affected, because in cases attended with tenderness of the spine in the neighbourhood of the splanchnic ganglia, and in which there was no reason to suspect disease at the origin of the par vagum, he has seen large quantities of air and acid fluid secreted by the stomach; and in this view he is strongly supported by Lobstein.

"I will briefly recapitulate the inferences which appear deducible from the preceding observations.

"That painful affections of the nerves of the heart, lungs and stomach, are not seated in the filaments of the pneumo-gastric nerve, since this nerve is not a nerve of sensation, and therefore cannot be the seat of pain; consequently that they must be seated in the filaments of the sympathetic.

"That the action of the blood-vessels and muscular viscera is dependent upon the sympathetic, and consequently that irregularities in the action of these involuntary muscles may with much greater probability be referred to disease in the sympathetic than in the cerebro-spinal system.

"That as digestion has been observed to take place in some instances after the division of the eighth pair, and that it proceeds in animals which have not this nerve distributed to the stomach, it is evident that some other system of nerves (the sympathetic) exerts a considerable influence in digestion, and consequently that disease in the sympathetic may disorder or interrupt the digestive process.

"I must now refer to the pathological principle with which I commenced; namely, that disease of the nervous masses is not so much evinced by symptoms in the immediate seat of disease, as by phenomena exhibited in those remote parts to which the nerves arising from the diseased portion are distributed. Upon this principle those nervous diseases of the heart, lungs, and stomach, which have been shewn to be more probably dependent upon the sympathetic than upon the cerebro-spinal system of nerves, *should not be regarded as diseases of the particular filaments distributed to these organs, but as diseases of the ganglia or masses from which the filaments are derived.*

"The *probability* that these diseases depend upon an affection of particular ganglia is still further corroborated by the fact that tenderness may generally be detected in that part of the spine which is contiguous to the particular ganglia. Thus, when the heart is affected, there is tenderness in the cervical vertebræ; when the stomach is affected, the tenderness is seated in the middle or lower dorsal portion of the spine. The result of treatment directed to these parts may be still further adduced in corroboration." 65.

NEURALGIA OF THE HEART. It not unfrequently occurs that the action of the heart betrays signs of irregularity which cannot be ascribed to structural disease. When excited by mental emotion, or stimulated by exercise, it palpitates with unusual frequency and force; when the causes of its disturbance have ceased to operate, the irregularity continues unabated, and after variable intervals returns without any sufficiently obvious reason. Females seem to be more obnoxious to these "nervous palpitations" than

males; as the complaint advances the paroxysms become more frequent, are of longer duration, are induced by more trifling causes, and are separated by less distinct intermissions; and ultimately to speak or move is quite sufficient to induce them. These palpitations are often accompanied by pains in the heart and lungs, not very unlike rheumatism, which are sometimes seated in the arch of the aorta, sometimes pursue the course of its large vessels, and when they attack the bronchial tubes produce strong asthmatic symptoms. This state of the heart and lungs the author believes to depend "generally, if not always" upon a morbid state of the cervical ganglia of the sympathetic; but as the spinal cord is rarely healthy when these ganglia are diseased, it is not unusual to find that these neuralgic symptoms of the heart and lungs are complicated with darting pains along the cutaneous nerves of the head and neck, fixed pains around the shoulders, pains, numbness and tremors of the arms, and, what is somewhat singular, the left side is more frequently, as well as more violently affected than the right.

"Palpitations, purely nervous, are principally distinguished from palpitations dependent upon organic disease of the heart, by the absence of other symptoms which denote a change of structure in that organ; in hypertrophy, the pulsations of the heart are more vehement and more uniform; in dilatation, they are felt over an unnatural extent of the chest; when there is obstruction to the circulation from contracted orifices, from loss of function in the valves, or from morbid alterations of the muscular structure, there are generally, in a greater or less degree, blueness, œdema, &c. These symptoms, in general, are sufficient to distinguish the two affections; I will, however, add to them the stethoscopic distinctions enumerated by Laennec: 1. The heart is found to be of natural size; the sound, though clear, is not strongly heard over a great extent. 2. The shock, although apparently strong at first, has, in reality, but little impulse, for it does not sensibly elevate the head of the observer. The last sign he regards as most important, when, in addition to it, we consider the frequency of the pulsations, which is always greater than natural." 45.

The two succeeding cases are good illustrations of this form of neuralgia. Mrs. H. aged 53, had been for many years subject to palpitations and dyspnœa, which were supposed to depend upon the presence of water in the chest, which varied much in intensity at different periods, and became so severe in September, 1828, that they occurred repeatedly in the day, and during night not unfrequently awoke her. The action of the heart was very violent, the dyspnœa occasionally threatened suffocation, a wheezing sound was heard in the upper part of the chest, and when the hand was applied to it a peculiar vibration could be perceived. Each paroxysm lasted about fifteen minutes, and in the interval the lungs and heart resumed their natural action. She was also annoyed with "fluttering" sensations in the arms, twitchings in the muscles, stiffness of neck, and a hoarse cough, unattended with expectoration. The third, fourth, and fifth cervical vertebræ were very, and a few of the superior dorsal were somewhat tender, in consequence of which leeches were applied with immediate relief, and the next day a blister produced still greater ease. On the 15th the palpitations and twitchings became more severe, another blister was recommended, and by the 22d she felt quite well. Her complaint again returned on the 20th of December, and was again removed by leeching and blistering; she continued well until May, when another slight attack called for the employment of the

same remedies, and up to the 29th of August, of the present year, she has not only remained free from every neuralgic symptom of consequence, but has gained flesh and enjoyed good health.

Sarah B. aged 17, had been five months affected with pain in the region of the heart, and palpitations which occur in paroxyms that are very violent during day, and less severe at night. The pain over the heart occasionally extended to the region of the lungs, the arms and scalp were often attacked with darting pains, an oppressive tightness was felt across the sternum, and there was great tenderness of the five superior vertebræ of the neck. By employing the ordinary remedies—leeches and blisters—and using the saline mixture for slight febrile symptoms, the palpitations and pains gradually disappeared, and in little more than a fortnight she was perfectly restored to health.

Whether, and how far these symptomatic derangements of the heart predispose to organic disease are questions of great interest; but the facts, which we yet possess upon these points, are so few, that it is impossible to enter into them with any prospect of a satisfactory result. When a muscle is forcibly and frequently exercised, an increased supply of blood and nervous energy is sent to it, that the demands made upon it in consequence of increased action may be fully satisfied. This extra supply is followed by extra growth, this extra growth gives rise to augmented energy, and in process of time both the form and function of the excited organ experience considerable change. In the brawny arms of the blacksmith, and in the muscular legs of the pedestrian, these remarks are strongly substantiated; and we are not aware of any principle in the animal economy, which prohibits our extension of this train of argument from external to internal organs. The heart is a muscle quite as much as the biceps, or gastrocnemius; and although it may not be as sensibly alive to mental stimuli as they are, it is subject like them to all the laws of muscular agency and organic life. Why, therefore, may not over excitement largely and long applied modify the anatomy of this organ as well as that of any other muscle, and why may not hypertrophy, or flaccidity of its walls succeed to an increased, or diminished condition of its function, as a limb emaciates from disuse or enlarges from exercise? Laennec admits the possibility of such consequences, while he has never met with any examples, and the author confesses himself unable to speak with decision either in favour or against it; so that at present the subject lies quite open to investigation, and we hope that its great interest will procure for it the attention it requires and deserves. There is no doubt but that organic disease of the heart may exist in connexion with neuralgic symptoms dependent on either spinal, or ganglionic irritation, that they may mutually aggravate each other, and that treatment, exclusively limited to the removal of the nervous irritation, has been found materially to relieve the organic disease. Whether, therefore it be true or otherwise, that what was mere neuralgia of the heart may ultimately issue in structural alteration, it is in every instance of heart-affection prudent, if not necessary, to attend to the condition of the spinal column.

"The treatment of nervous palpitations and neuralgic affections of the heart and lungs, has in general proved very unsatisfactory. The means employed as remedies have been various in the extreme. These complaints have been treated by anodynes, antispasmodics, and tonics; by bleeding, digitalis, and prussic acid; by electricity, galvanism,

and magnetism; and by irritants and depletory measures applied to the *exterior* parts of the chest. These means have generally failed to give relief, and some of them have even aggravated the disease. Not unfrequently has it happened that the unfortunate subject of nervous palpitations, after having tried in succession almost innumerable remedies, and having repeatedly changed his medical attendant, is obliged to endure with patience his distressing nervous companions, and console himself with the assurance that his complaint is '*seldom attended with danger.*' I feel considerable confidence in stating, that when the disease is treated upon the principle which I have laid down, namely, of referring the palpitations and pains in the heart to disease of the cervical ganglia, the most beneficial results will, in the generality of cases, be obtained." 47.

Neuralgia of the Stomach. We believe it is now very generally admitted that an irregular condition of the stomach, depending on chronic inflammation of its mucous coat, is a frequent source of dyspepsia and its lengthened train of disastrous symptoms. This state may be relieved or removed by proper diet, occasional leeching and gentle sedatives. Another form of dyspepsia results from direct debility of the digestive organs, as a consequence of previous disease, and may be beneficially treated with tonic medicines. But there is a third variety of gastric ailment, which neither leeching and abstinence on the one hand, nor tonics and nutriment on the other can affect, yet the majority of its accompanying phenomena are so similar to those of the preceding cases, that they may be easily confounded. Its principal symptoms are impaired digestion, giving rise to acidity and distention; pain in the stomach, which may be confined to a small compass or be diffused over the whole epigastric region; flatulency depending not on the decomposition of indigested aliment, but on the secretion of air by a disordered stomach, pyrosis, pulsation in the epigastre, a corded sensation around the waist, soreness along the edges of the ribs, pain in the intercostal and abdominal muscles, and other indications of disease in the spinal nerves. Indigestion and gastrodynia, the first two of the preceding symptoms, are common to gastritis and gastric neuralgia, and cannot be depended on; but the author thinks that the others are very diagnostic, more especially when attended, as they usually, are, with tenderness of the spine. Flatulence from secretion, he believes to originate seldom in gastritis, pyrosis never, and a sense of constriction around the waist, soreness of the ribs and muscular pains rarely accompany it, while they are seldom absent from ganglionic disease. Præ aliis vero, says Lobstein, symptomatibus eminet flatuum extricatio, seu *pneumatosis*, e nervorum actione perversa oriunda. It must be remembered, however, that these points are not yet sufficiently well understood to admit of positive opinion, and it is certain that if disease of the ganglia continue long, the mucous membrane of the stomach, exposed as it is to continued irritation, may fall into an inflamed state, and thus may appear such an intermixture of idiopathic and sympathetic disease as shall require our treatment to be divided between the epigastre and the spine. Had the following case fallen under the care of some of our London brethren, the class of medicines which would have been adopted, it is not difficult to conjecture.

A married lady, aged 23, (June 5th, 1828) has been complaining for the last five weeks of a fixed pain in the left side of the abdomen, which is

increased by pressure, an oppressive weight of the stomach after eating, constant weariness, extreme debility, a sense of constriction around the waist, which during night is distressingly severe, and an afflicting pulsation in the epigastre, which never ceases for a moment. All these symptoms are very much aggravated by taking food, and the stomach is so irritable after eating that it regurgitates by mouthfuls what has been swallowed, until it again becomes empty. Slight flatulence and acidity are constant attendants on the digestive process. On examining the spine the 7th, 8th, 9th, and 10th dorsal vertebræ betray much tenderness, and some of those both below and above are rather uneasy when pressed. Aching pains are also complained of in the legs, the skin covering the thighs is sore when rubbed, and prickling sensations are felt in the course of the saphena vein; blister to tender vertebræ; 10th, so much better as to say that she is "not like the same being." Pain and oppression of epigastre gone, pulsation diminished, food not rejected, is free from flatulence and acidity, lower extremities unafflicted with either prickling or pain; but as the spine was still somewhat tender a second blister was applied with the effect of banishing every morbid feeling.

An emaciated old woman (June 11th, 1828) has complained for several months of periodical pains across the epigastre, resembling cramp, a corded sensation round the waist, sudden and copious discharges of air from the stomach, sometimes continuing for an hour at once, and pyrosis in a severe degree. The 4th, 5th, 7th, and lower dorsal vertebræ were very tender under pressure, but there was no affection of the extremities. A blister had been applied to the epigastre without relief; blister to the lower dorsal vertebræ. (19th.) Pyrosis and sense of stricture gone, flatulence much diminished, fifth dorsal vertebra still tender: six leeches to this vertebra. On the 24th flatulence was trifling, and on the second of July every symptom of disease was gone.

ANGINA PECTORIS. There are few diseases of which we know so little with any certainty as that to which Heberden gave the name of *Angina Pectoris*. The symptoms, by which it is described by various authors, are more remarkable for their variety than any thing else; the pathological products discovered after death are not much more uniform than the symptoms, and its treatment has experienced as many vicissitudes as the theories, which have been fabricated to explain its origin. Dr. Heberden observes that a disagreeable sensation in the breast comes on while walking, more especially after meals, and vanishes the moment that we cease to move. Dr. Walls describes it as a pain under the sternum, extending on each side across the breast, and affecting one or both arms where the pectoral muscle is inserted into the os humeri. Dr. Fothergill relates a case in which the leading symptoms were a sense of tightness around the chest, in a line with the mammæ, and a pungent pain under the left breast, which extended to the elbow of the left arm. Dr. Butter considers that the paroxysms are marked by dyspnœa and flatulence, and that relief is often obtained by eructation. Dyspnœa is excluded from the catalogue of symptoms by Dr. Parry, and he relates a well marked case in which there was neither pain in the arms, or chest. Dr. Blackall considers that palpitations are frequently characteristic of this disease, while Burns main-

tains that palpitations are incompatible with its existence. Parry describes it as depending on an ossified state of the coronary arteries, Desportes regards it as an affection which has its seat in the pneumogastric nerve, and Laennec believes it may originate in a diseased state of any of the nerves which supply the chest and neighbouring parts. The author agrees with these last writers in maintaining that angina pectoris has its seat in the nervous system; but, in place of considering with them that the nervous filaments are the parts diseased, "dans les filets que le cœur reçoit du grand sympathétique," he only regards them as the channel of intercourse, through which some disease in the spinal cord or sympathetic ganglia draws within its influence the functions of the heart. It is certain that symptoms of angina frequently occur and are removed, proving that there can be no serious disease in the structure of this organ; and how often have the coronary arteries been found ossified, where no syncopic symptoms had been visible? Looking upon the nervous filaments themselves as the morbid agents, treatment has commenced too generally at the wrong end, and blisters, issues and such remedies have been crowded on the chest; but the author thinks it much more consistent with facts to refer all the symptoms of disease to the nervous masses from which these nerves arise, and to direct our remedial measures to the spine in preference to the chest. Tightness round the waist, oppression at the epigastre, and pains in the intercostal and abdominal muscles he traces to the lower portion of the dorsal spine; flatulence and pyrosis to the lower thoracic ganglia of the sympathetic pairs; numbness in the neck and upper extremities to the cervical division of the spinal cord; palpitations and painful affections of the heart and lungs to the cervical ganglia.

"I have been induced to refer the various groups of symptoms which have been described as angina pectoris, to an affection of some portion or portions of the spinal marrow, and of the corresponding ganglia of the sympathetic, by the following considerations.

"1. The fact, as I have before observed, that most of the morbid phenomena exhibited in the extreme filaments of nerves, are seldom owing to disease in the nerves themselves but to an affection of the nervous mass from which they are derived.

"2. The co-existence of pain on pressing some portion of the spine with the symptoms constituting angina pectoris; and the correspondence of the painful part of the spine with the particular symptoms which are present; namely, tenderness in the lower dorsal portion of the spine in conjunction with the stomach affection, constriction, &c. and tenderness in the cervical spine, with pains in the arms, breast, and shoulders and palpitations.

"3. The relief obtained by local antiphlogistic measures to the spine; for instance, to the lower dorsal portion when the stomach is affected, and there is constriction, and to the cervical portion when there is an affection of the arms and palpitations." 108.

Our limits allow us room for only one example and it is an important one, as showing how closely connected the ordinary symptoms of spinal irritation are with those ascribed to angina pectoris, and tending to the presumption that they not only all depend on one common cause, but that they may pass and repass into each other, as this cause is moderate or intense.

A lady, aged 56, applied to the author (on the 18th of August, 1828) in consequence of general muscular debility, palpitations, sense of epigastric tightness, and flatulency. Most of the cervical and some of the dorsal

vertebræ being tender, leeches were first ordered and afterwards a blister, which gave such relief that in a few days she acknowledged herself better than she had been for many months. But on the evening of the 25th she was suddenly seized with coldness, an inexpressible sense of suffocation, tightness and oppression of chest, pain darting from the left arm into the elbow and down from the neck to the left breast, with a frightful feeling of impending death. A discharge of air from the stomach gave some relief, and a sinapism to the spine, warmth to the extremities, and internal stimuli soon restored her to a state of comparative ease. As the spine was again tender, and the symptoms at first complained of were again visible, blisters were recommended; but the patient, being obliged to return to her family, was removed from Mr. Teale's care, and the final result is unknown.

The diseases, which have now been described, appertain more especially to the heart, lungs and stomach; but the author believes that other organs are occasionally affected in a similar way and from the same cause. The small and large intestines, the kidneys, bladder and uterus are not unfrequently the seat of neuralgia depending on spinal disease, and remedial by means directed to the tender vertebræ. Hodie certissime evictum est, says Lobstein, quod tot numerosæ sensationes quæ in epigastrio percipiunter, neque ad musculos, neque ad vasa, neque ad organa gastrica sint referenda; sed magis ad plexum nervosum gangliosum trunco cœliaco insidentem. Autenreith likewise observes (in the first volume of the Jübinger Blœtter für naturwissenschaft und Arzneykunde) that in the bodies of those who have died of typhus, he has occasionally seen the abdomninal nerves altered in appearance.

"It is of great importance to bear in mind the circumstance that these nervous affections sometimes accompany other diseases. When the vertebræ, or intervertebral cartilages are inflamed, the neighbouring nervous tissues often participate, and neuralgic symptoms are the result. These nervous affections often constitute the most distressing part of the complaint, and, by proper attention to them the sufferings of the patient may from time to time be alleviated during the lingering progress of the vertebral disease. In fevers, symptoms of a neuralgic character often make their appearance, and aggravate the sufferings of the patient. The following case lately occurred to me. A young lady, having proceeded in a favourable manner for two or three weeks under common fever, became affected in the afternoon with paroxysms of oppression in respiration, attended with severe aching pain and constriction round the waist. These symptoms returned about the same hour for four or five days, gradually increasing in violence until they became truly alarming; tenderness was discovered in two or three of the dorsal vertebræ, and a few leeches applied to the painful part, prevented the recurrence of the attacks. The fever afterwards pursued the usual course, and ultimately terminated favourably. Neuralgic affections of the scalp, connected with tenderness in the cervical vertebræ, often occur in fever, and are sometimes mistaken for pain of the enchephalon. In phthisis, pains in the intercostal muscles, and oppression of respiration, are often of a neuralgic character, and readily admit of alleviation; the more formidable disease of the lungs, however, seems to predispose to their recurrence.

"Dr. Brown has observed neuralgic pains in the neck and scalp accompanying severe inflammatory affections of the fauces, and has also met with similar symptoms in conjunction with hepatitis. My own observation enables me to confirm these remarks of Dr. Brown. The principal neuralgic symptoms which I have observed in conjunction with hepatitis, are constriction across the epigastrium and pain or tenderness along the cartilages of the ribs. This pain is sometimes supposed to be seated in the liver, when the

right side is affected, but a precisely similar affection is as frequently met with on the left. I have known this neuralgic affection to be treated as hepatitis when there has not been any real evidence of the disease of the liver. A patient is now under my care, who is suffering from hepatitis, as denoted by yellowness of the skin, bilious urine, clay-coloured fæces, and deep-seated tenderness beneath the cartilages of the ribs; during the course of this complaint, he was for several mornings in succession attacked, about five o'clock, with pain and constriction across the epigastrium which he compared to cramp, flatulent distention of the stomach and intestines, pain along the cartilages of the lower ribs on each side, and on pressing these parts a degree of soreness was felt; the attacks continued from one to two hours, during which great restlessness was produced. Tenderness was detected in the vertebræ, and a blister has quite removed the paroxysms.

"These circumstances point out the important fact that irritation of the capillary expansions of nerves may sometimes excite actual disease in the parts where the nerves originate." 55.

With a few remarks upon the probable connexion between colica pictonum and nervous disease, and a cautionary admonition to the reader against supposing that he has been either advocating an impregnable theory, or a practice which must ever prove infallible, Mr. Teale concludes his little work, and it were quite superfluous in us to repeat in plainer language than has been already used, the estimate which we have formed of its execution. Suffice it to remark that, although we do not look upon his plan of cure in neuralgic disease as proof against disappointment, we consider it one of the most promising which has ever been recommended; and, although we must as yet hold his views of this disease as theoretical, until dissection supply the *experimentum crucis*, we are troubled with as few misgivings on the subject of its orthodoxy, as any can be during the absence of the *chief witness*. Mr. Teale has done much in a little book to elucidate an obscure order of diseases, and we have no doubt but that his labours will receive that recompense which talent and industry deserve.

XIII.

Hospital Facts and Observations Illustrative of the Efficacy of the New Remedies, Strychnia, Brucia, Acetate of Morphia, Veratria, Iodine, &c. in several Morbid Conditions of the System; with a Comparative View of the Treatment of Cholera, and some Cases of Diabetes, &c. By *James Lomax Bardsley*, M. D Physician to the Manchester Infirmary, &c. &c. London, 8vo. pp. 224, 1829. Burgess and Hill, Great Windmill Street.

Dr. Bardsley appears to be a modest, intelligent, observant, and candid physician, who has had ample field for testing and comparing the effects of various remedies in various diseases, during his official duties at public institutions. In recording and publishing the results of his experience, he does the utmost in his power to further the interests of humanity, by increas-

ing our knowledge or correcting our errors. Conscious of the mischief which has flowed, and which daily flows from the blazoning forth of successful cases, leaving the unsuccessful in the shade, Dr. Bardsley has made a point of detailing the unfavourable as well as the favourable cases treated more especially by that important class of substances the VEGETABLE ALKALIES, with the view of determining their real therapeutic properties. He has also made observations on the treatment of CHOREA and DIABETES by different remedies—diseases which appear to be very common at Manchester.

We shall glance at the several sections of the work, in which the author's experience is detailed.

I. *Strychnia in Paralysis.* It appears from the experiments of Desportes, Magendie, Delile, Orfila, and others, that the nux vomica does not occasion any organic lesion in the animal frame, though it has a direct action upon the nervous system, causing death from asphyxia produced by the immobility of the chest during the violence of the tetanic spasms of the thoracic and abdominal muscles. Fouquier was led to make trial of the strychnia in several cases of paralysis of the lower extremities, and published his successful results in that disease; and many others have employed the remedy with various, if not doubtful issues. Dr. B. details 23 cases of paralysis treated with strychnine, and gives a tabular view of twelve more. We shall glance at some of these in a condensed form.

Case 1. A female aged 30, had entirely lost the power of the left side, with diminished sensibility, occasional head-ache and vertigo—articulation impaired—urine and fæces passed involuntarily—face drawn a little to one side—pulse feeble at 86—countenance pallid. The attack had occurred three months previously, shortly after parturition, and had gradually increased. Attributed the complaint to cold and over fatigue when far advanced in pregnancy. Leeches, blisters, and aperients having been premised, the strychnine was exhibited in doses of the twelfth part of a grain twice a day, and afterwards increased in frequency and quantity. It was more than three weeks before she began to feel the influence of the medicine, in slight pricklings of the paralyzed limbs. The sensation began to revive—smart convulsive twitchings occurred—motion improved—she had some command over the bladder and rectum—and finally recovered completely. The strychnine amounted to a grain twice a day, before the cure was affected.

"REMARKS. In this case the strychnia was very serviceable, and indeed, the patient's recovery was fairly attributable to a persevering use of this active remedy. The twelfth of a grain of the alkali was first exhibited twice a day, and this proportion was increased at regular intervals to the extent of one grain twice a day; but it was found that the patient could only take half a grain thrice in the day without experiencing a slight degree of inconvenience. The appetite was much improved during its exhibition." 10.

Case 2. This was a man aged 31 years, who, after being troubled with pain in the head for some months, lost the entire power of the lower extremities, their sensibility remaining unimpaired. The power over the sphinc-

ters was also lost—the flesh was reduced—the complaint of three month's duration—and the cause ascribed to fatigue and cold. Cupping and purging having been premised, the strychnine was exhibited, beginning with the fourth part of a grain three times a day, and gradually increasing the dose to half a grain three times a day, when convulsive twitchings were much complained of, but unaccompanied by vertigo or other distressing symptoms. The dose was ultimately augmented to double the above quantity, but severe pain at the scrobiculus cordis was the consequence, with violent spasmodic action of the muscles of the thorax and lower extremities, requiring powerful stimulants. Long and repeated trials were made of the medicine, but no benefit whatever was derived from its administration, and the patient was ultimately discharged uncured. The next case we shall quote in the words of the author.

"Case 3. Samuel Ogden, aged 46, admitted 21st June, 1824. He has been paralytic for more than four months, having lost the entire power of the limbs of the right half of the body; and the muscles of that side have not recovered their former bulk and plumpness. He has been addicted to great irregularities in his general mode of living. Complains of pain in front of the head accompanied by vertigo. Speech rather inarticulate. Memory slightly impaired. Urine and fæces are both involuntarily and unconsciously discharged. Appetite indifferent. Pulse feeble. Countenance somewhat sunk. Six leeches were ordered to each temple, and a blister to the nape of the neck. To take three ounces of the Mistura Sennæ Composita immediately, and to repeat the dose every three hours until the bowels have been freely evacuated. 23d. Head relieved by leeches and blister. Several copious stools procured by a second dose of the purging mixture. To commence with one-twelfth of a grain of strychnia in the form of a pill twice a day. 26th. Head continues free from pain. Bowels constipated. Paralytic parts remain in the same state. Dose of strychnia to be increased to the one-sixth of a grain three times a day, and the purging draught to be exhibited on alternate mornings. 29th. The only effect of the medicine as yet perceptible is an occasional sensation of heat along the spine. Bowels kept regular by draught. Dose of strychnia to be increased to the one fourth part of a grain three times a day. 4th July. Slight convulsive twitchings of the paralyzed members. Head remains free from uneasiness. Thinks he possesses a little more feeling in the bladder and rectum. Dose of strychnia to be increased to half a grain twice in the day. Slight tetanic symptoms have been present after each dose of the medicine, but they are by no means alarming, or of long continuance. There appears to be some improvement in the affected limbs, for he can now raise both the arm and leg with a little assistance, which he was quite incapable of effecting on his admission. This circumstance affords him great satisfaction, and inspires him with hopes of recovery. Half grain pill to be taken three times a day. 7th. This quantity was more than the patient could bear, as it produced vertigo, stupor, pain at scrobiculus cordis, irregular convulsive startings both of the sound and paralyzed parts, tendency to syncope, weak pulse, and extreme debility. The pill was therefore ordered to be given only twice a day. He is now capable of gently moving both the affected arm and leg, and of retaining, during the day, his urine and fæces. To continue the pills. 10th. The diseased side improves. To persevere with the pills. 13th. The patient can now move both the arm and leg in several directions, and also support himself in the upright posture, by the help of a stick in the left hand. To have four ounces of wine daily and to continue the pills. 17th. Yesterday, with the assistance of crutches, he walked more than once across the ward, and he has acquired almost a full command over the muscles of the rectum and bladder. Pills to be continued. Wine to be increased to eight ounces in the day. The pills were regularly taken until the 1st of August, and the patient's amendment appears, from the last report up to this period, to

have been progressive. On his discharge he could walk from one end of the large ward to the other by the aid only of a small stick, and the functions of the bladder and rectum were completely restored.

"REMARKS. This case affords evidence of the remedial efficacy of strychnia in palsy, and points out in a striking manner the *peculiar* action of the alkali upon the paralytic members, since no other remedies, with the exception of a few leeches to the temples, a blister to the nape of the neck, and occasional doses of aperient medicine (on the patient's first admission) were employed. I had my doubts respecting the propriety of administering the alkali in this instance, as there was some reason to fear, from the previous intemperate habits of Ogden, that the hemiplegia was owing to disorganization of the brain; hence I adopted the precaution of relieving the vessels of the head before I commenced with the use of the strychnia. One grain during the day was as much as he could take with safety, for when the dose was increased to a grain and a half daily, very unpleasant effects followed. It would have been improper to have pushed the remedy beyond the limits pointed out by the symptoms. It may be well to notice the *sensation of heat along the course of the spine* more than once experienced by the patient, and first mentioned by himself, without the question having ever been put to him, as it tends to confirm the opinion before stated, respecting the peculiar action of the strychnia upon the spinal chord." 20.

Case 4. This was a spinner, aged 29 years, who, six months previously was seized with loss of power in the lower extremities after bathing whilst the body was much heated with exercise. At the time of admission he was incapable of motion without the aid of crutches, and passed his urine and fæces involuntarily. The spine was free from pain—strength much reduced—appetite bad. The strychnine, in the dose of one-sixth of a grain three times a day, was exhibited, and augmented to a quarter of a grain every four hours, when severe convulsive twitchings took place in the affected limbs. In less than a month he became capable of retaining both his urine and fæces, and of walking from one end of the ward to the other by the aid of a small stick. He was entirely cured.

Case 5. Sarah Hilton, aged 36 years, was admitted on the 7th September. This woman had suddenly lost the power of the right side of the body. The attack was preceded by severe pain at the crown of the head, drowsiness, faulty articulation, &c. The intellectual faculties were impaired, as was the power over the sphincters. She was ordered five grains of calomel, followed by a saline aperient, which were repeated, and then the strychnine was exhibited, in the dose of a quarter of a grain every six hours. This was gradually increased till violent twitchings of the paralytic parts ensued, attended by nausea and dyspnœa. These symptoms were relieved by plenty of brandy and water. The medicine was soon afterwards resumed and continued. The power of motion in the paralyzed parts soon began to return—the amendment was rapid—and in about seven weeks the cure was complete.

Passing over a case or two, we shall extract the following without abbreviation.

"CASE 6. ROBERT HOBSON, 38 years of age, finisher, admitted an in-patient, October 6, 1827.

"This is a case of paraplegia, the patient having lost the power over the inferior extremities, rectum, and bladder. He states that he first perceived about four months ago a weakness in his legs, rendering it necessary for him to use considerable effort to drag them along. This debility gradually increased, until at length he became altogether incapable of moving the lower limbs. He has no feeling in them. Head free from pain or giddiness. Pulse regular, appetite impaired. Being desirous of putting the *individual* efficacy of the strychnia to the test, I commenced with the exhibition of the alkali in the proportion of a sixth of a grain twice daily, without previously employing internal or local remedies of any kind. October 10th. No change. Dose to be increased to the fourth of a grain three times in the day. 20th. He considers himself better, having obtained a slight command over the sphincters of the bladder and rectum On the 14th, he first experienced involuntary twitchings in the inferior extremities, which have been continued at intervals up to the present time. To take half a grain of the alkali twice daily. 28th. He is in excellent spirits, owing to the benefit he has derived from the pills. He can raise the lower limbs to some height from the bed, and also retain at pleasure both his urine and fæces. During the last week, the twitchings have been rather severe, but not painfully so. He is very desirous of persevering with the pills. To continue. November 7th. Since the last report, the patient has been allowed to sit up for several hours during the day. He is surprisingly improved, being able to walk without the aid of a stick from one end of the long ward to the other. Appetite good. Bowels regular. Warmth and sensibility of inferior extremities natural. Half grain pill to be taken three times daily. 26th. The additional half grain excited for some days powerful twitching in the legs and thighs, but in the course of a week or less they became not more severe than was occasioned by half a grain of the alkali taken twice in the day. He is now capable of walking as well as at any former period of his life, and his general health is excellent. It is impossible to describe the gratitude which this patient felt for his restoration to health. He was ordered to be discharged *cured* at the first meeting of the weekly board." 20.

Our author next states the effects of the strychnia in thirteen cases of paralysis; but, in order to avoid tiresome details of history, he merely mentions the age of the patient, duration of the disease, time of admision, dose of alkali employed, length of time it was continued, and the result. This abbreviation we shall here introduce, as it harmonizes with our own plan of brevity.

"Case XI. August 4th, 1825, Elizabeth Taylor, aged 38.
"Has been paralytic on the right side for two months. Attack sudden, accompanied with pain in the head. To commence with the eighth of a grain of strychnia twice daily. Gradually increased to half a grain twice in the day. Continued this dose for three months. Discharged cured.

"Case XII. September 2d, 1825, Sarah Whyatt, aged 53.
"Ill six months. Hemiplegia of right side. Fourth of a grain of strychnia to be taken twice daily. Increased to half a grain, at the same intervals. Continued for four months. Discharged relieved.

"Case XIII. October 4th, 1825, William Johnson, aged 16.
"Paraplegia of six weeks standing. Cause of disease unknown. Sixth of a grain of alkali to be taken twice in the day. Increased to the fourth of a grain. Persevered in its use for two months. Discharged cured.

"Case XIV. December 30th, 1825, Thomas Griffiths, aged 61.
"About two months ago was seized with hemiplegia of the left side. Former habits

intemperate. Head painful. Ten leeches to be applied to temples. Pain in the head removed by leeches Sixth of a grain of strychnia to be given twice in the day. Increased to half a grain. Continued three months. Discharged relieved.

"CASE XV. January 4th, 1826, ANN LLOYD, aged 42.
"Has been paralytic on the left side for more than six months. Commenced with the eighth of a grain of alkali. Increased to half a grain three times daily. Continued four months. Discharged cured.

"CASE XVI. January 15th, 1826, THOMAS KNOTT, aged 50.
"Hemiplegia of left side. Experienced the attack about twelve months ago. Sixth of a grain of strychnia to be taken each morning and evening. Increased to a grain and a half during the day Persevered in the use of the remedy with great regularity for three months. Discharged much relieved.

"CASE XVII. April 2d, 1826, THOMAS OGDEN, aged 40.
"Has laboured under paralysis of right side for two months. To commence with the sixth of a grain of alkali twice in the day. Increased to half a grain. Continued two months. Discharged cured.

"CASE XVIII. September 3d, 1826, JOHN LEVERS, aged 46.
"Paraplegia of three month's continuance, induced by a severe fall upon the sacrum. Sixth of a grain of strychnia twice daily. Increased to half a grain. Remained in the hospital two months. Discharged cured.

"CASE XIX. August 19th, 1826, MARY GRADY, aged 62.
"Lost the power of right side four months ago. Fourth of a grain of alkali twice daily. Increased to half a grain. Three months trial of the medicine. Discharged relieved.

"CASE XX. October 6, 1826, WILLIAM SICKSMITH, aged 39.
"Paralytic on right side five months. Fourth of a grain of strychnia twice daily. Increased to a grain and a half in the course of a day. Discharged cured in less than ten weeks from the time of admission.*

"CASE XXI. December 28th, 1826, —— JONES, aged 33.
"Lost power of right arm about year and a half ago. Eighth of a grain of strychnia three times in the day. Gradually increased to half a grain twice daily. Two months trial of alkali. Discharged cured.

"CASE XXII. February 4th, 1827, JAMES WILSON, aged 29.
"Attacked suddenly in March last with paraplegia after exposure to wet and cold. Dose of strychnia to be increased from sixth of a grain to half a grain twice daily. Used this remedy for one month. Discharged cured.

"CASE XXIII. November 4th, 1827, JAMES TURNER, 42 years of age.
"Has laboured under hemiplegia of left side for five weeks. Commenced with the sixth of a grain twice daily. Dose increased to half a grain. Remained two months in the hospital. Discharged cured.

"The following table will also shew the results of the exhibition of strychnia in *twelve* more cases of paralysis.

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* "This man since experienced an attack of pareplegia, and is now using the strychnia (at his own request) with advantage. March 10th, 1828."

No.	Names.	Age.	Duration of complaint.	Disease.	Result.
24	James Faris, I. P.*	28	3 months.	Hemiplegia of the left side.	Cured.
25	Charles Walker, I. P.	44	6 months.	Ditto.	Much relieved.
26	Robert Ashton, H. P.	54	2 years.	Paraplegia.	Slightly relieved.
27	Margaret Lewis, O. P.	17	2 months.	Ditto.	Cured.
28	Denis Hagan, H. P.	44	6 weeks.	Hemiplegia of right side.	Much relieved.
29	Henry Black, I. P.	23	3 weeks.	Paraplegia from a fall.	Cured.
30	John Allensworth, O. P.	62	12 months.	Hemiplegia of right side.	No benefit.
31	Isabella Gale, I. P.	33	3 months.	Ditto.	Left the house.
32	David Davis, H. P.	51	3 months.	Hemiplegia of left side.	Much relieved.
33	Jane Shaw, H. P.	19	4 weeks.	Paraplegia from cold.	Cured.
34	Owen Morris, O. P.	54	7 months.	Hemiplegia of left side.	Relieved.
35	Jacob Long, O. P.	49	12 months.	Paraplegia.	Cured.

Observations.

Our author thinks and we agree with him, that the foregoing recital is sufficient to prove that strychnia excites a very powerful influence on the system, and that it is entitled to rank as a valuable remedy in the materia medica. It was employed in some cases without benefit, in others with partial advantage—but, in the majority, with complete success. Hence, he conceives, it may justly be considered an *efficacious*, though not a certain remedy in this affection. When cerebral disorganization has once taken place, it is, of course, in vain to expect a cure from any medicine. "It is in such cases of paralysis as seem to arise from diminished nervous excitement, that the strychnia is particularly indicated."

"It may be stated here, as a rule of guidance, that whenever hemiplegia supervenes to an apoplectic seizure in persons of a plethoric habit, it is proper to employ bleeding, purging and the ordinary antiphlogistic treatment, before resorting to the use of the strychnia. When the vessels of the head have been freely unloaded, and the quantity and force of the circulating fluid diminished by the above means, there can be little objection to a *cautious* and prudent trial of this remedy. Generally speaking, the strychnia is likely to prove more serviceable in pariplegia, unconnected with spinal disease, than in hemiplegia; though I feel confident, that it will not unfrequently be found an important remedial agent even in hemiplegiac paralysis." 39.

* "The abbreviations, I. P., H. P., and O. P., denote in-patients, home-patients, and out-patients."

Dr. B. has not tried the strychnine on children, nor would he advise the attempt. The first effects of the medicine in every case, were convulsive twitchings of the paralytic members, and no benefit was derived until this condition of the parts had been produced and continued for some time.—This appears to have been the case with iodine in the hands of that very intelligent and candid physician, Dr. Manson. In Dr. Alderson's experiments, too, with the rhus toxicodendron in paralysis, twitchings and tinglings in the paralytic members appear to have been the first steps towards recovery.—Strychnia does not appear to impair the energy of the stomach, but is rather serviceable in promoting appetite and digestion. Dr. B. recommends the practitioner to commence with not more than the eighth of a grain of strychnine twice in the 24 hours, which quantity is to be gradually increased to a sixth, fourth, or even a half a grain at the same intervals. Any unpleasant symptoms should be the signal for suspending the remedy for a time, when it is to be renewed in slowly augmented doses. "By attention to these points (says our author) although no benefit may accrue from the strychnine, we may be sure that no injury will attend its exhibition." He generally gave it in a pill, with a little conserve of roses.

II. *Strychnia in Chronic Diarrhœa.* Numerous instances of chronic diarrhœa occur among the out-patients of the Manchester Infirmary, some of which obstinately resist every kind of treatment. Under such circumstances, our author was induced to try the strychnia, "and it proved a *safe* and *effectual* remedy." To shew the foundation for this assertion Dr. B. has detailed several cases in illustration. Since he had prepared those pages for the press, he finds that Recamier had also exhibited the alcoholic extract of nux vomica with complete success. Dr. Rummel has also employed strychnia with advantage in chronic blennorrhœa of the rectum. A single case will suffice as an example.

"CASE III. JOHN NEARY, 55 years of age, admitted an out-patient, March 16th, 1826.

"He had been formerly addicted to the intemperate use of spirituous liquors, but of late years his habits have been regular and sober. He complained of a frequent desire to go to stool, having not less than five or six evacuations daily, and his strength had declined during the last month very rapidly. His appetite was impaired, and he had copious perspirations in the night. He attributed his complaint to exposure to wet and cold in January last. He had tried several remedies, but without benefit. The ordinary astringents were unsuccessfully administered. I then commenced with the strychnia, which succeeded as the reports will shew, in speedily restoring the patient's health. He began on the 18th, with the sixth of a grain of the alkali, night and morning, which was increased to the fourth of a grain three times a day. On the 10th of April he had not more than two stools daily—His appetite was better and he had gained strength. He continued this plan of treatment until the 24th when he was discharged cured. I saw the man about a year afterwards, and he informed me that he had not suffered any relapse of his disorder." 46.

In his remarks on the cases detailed Dr. B. observes that he does not consider the strychnia a suitable remedy in those instances of diarrhœa which depend upon an evident inflammation of the mucous membrane of the intestines. He particularly recommends the medicine in cases of a *chronic kind*, occurring in persons somewhat advanced in life, and of feeble constitution.

III. *Strychnia in Amenorrhœa.* This complaint is the source of many others of a very troublesome character, and is, moreover, one of very difficult management. It is therefore of importance to be able to name any new remedy which may be found occasionally serviceable in promoting a regular and natural flow of the catamenia.

"Previously to my experiments with the strychnia in this disease, I had been in the habit of employing aloes more extensively than any other medicine; and I can add my testimony to that of the venerable Dr. Hamilton, in favour of the utility of purgatives in exciting the action of the uterine vessels. In many cases, I have succeeded in obtaining a renewal of the menstrual discharge, by a steady but active administration of the aloetic pill *alone*." 51.

We shall glance at some of the cases.

Case 1. Phœbe Love, 33 years of age, unmarried, June 4th. She stated that she had not menstruated for five months past, the obstruction being attributed to cold. She appeared languid and weak—appetite impaired—countenance pallid—bowels costive. These last being brought into a proper state by aperients, the sixth of a grain of strychnine was administered three time a day. On the 16th June the dose was increased, there being no perceptible effect produced. The report of the 12th of July states that the general health is much improved—that she had felt some painful sensations in the hypogastric region during the last few days. On the 24th the menses appeared. The discharge continued regular afterwards, and she is now the mother of two children. We are unable to state any more of the cases, but shall present the following tabular view of eight cases not contained among the detailed accounts.

No.	NAME.	Age.	Duration of Complaints.	Result.
1	Mary Holfroys	44	9 months . . .	Cured.
2	Margaret Cain	29	5 months . . .	Ditto.
3	Sarah Hooley	24	12 months . . .	Ditto.
4	Jane Marsden	40	4 months . . .	Ditto.
5	Mary Ferguson	19	6 months . . .	Ditto.
6	Elizabeth M'Avoy	35	Ditto	Relieved.
7	Jane Wragg	38	18 months . . .	Cured.
8	Elizabeth Corr	29	2 years	Relieved.

The cases appear to our author sufficient to shew the remedial virtue of strychnine in some instances of amenorrhœa, owing, he thinks, to the power which the alkali possesses of stimulating the vessels of the uterus, and improving the tone and vigour of the system. Dr. B. advises the conjoint exhibition of mild laxatives with the alkali in this affection, when the bowels, as is most commonly the case, are constipated.

"Such are the results of my experiments with strychnia, which are calculated to set forth the *real* claims of this alkali to the notice of the profession, as a remedy in certain diseased conditions of the system. I think that I may venture to draw from them the two following conclusions. First, that strychnia, *cautiously administered*, is a safe and useful remedy in paralysis. Secondly, that it will *occasionally* be found serviceable in *chronic diarrhœa* and *amenorrhœa*." 58.

Dr. B. has appended several cases of paralysis treated by brucia an alkali

obtained also from the nux vomica, and weaker than the strychnine in the proportion of one to twelve. Ten cases are selected from among others, to show the powers of the brucia. His experience leads him to recommend it as a valuable remedy in paralysis—the action being analogous to that of strychnine, but less powerful—"hence," says he, "it is a preferable remedy in paralytic attacks, accompanied with much cerebral disturbance." It is prudent to commence with the dose of a grain twice a day, which is to be cautiously increased to two grains three or four times a day. Unless a marked advantage accrue from the administration of the remedy in the course of five or six weeks, it ought to be laid aside.

This brings us to about the middle of the volume, and as the remaining subjects of discussion are totally unconnected with that which we have now concluded, we shall defer our analysis of those topics till our next number. By this procedure we do not break the thread of any narrative, nor the unity of any investigation entered into by the intelligent author of the work under review.

XIV.

ON FUNCTIONAL DISORDERS OF THE LARGE BOWELS, AND ON CERTAIN DISEASES WHICH THEY OFTEN INDUCE. By *James Annesley*, Esq.

[ART. V.]

IN the 20th Number of this Journal, we brought the first volume of Mr. Annesley's work to a close, in four analytical articles which we dedicated to that stupendous publication. We now proceed to the second volume, the principal contents of which we shall lay before our readers, though not exactly in the order adopted by the author. Before entering on organic changes in the intestinal canal and some of the collatitious viscera, we shall first treat of certain functional disorders of the large bowels. The functional disorders here treated of, says Mr. A. "are chiefly characterised by a deficient tone or action—by a torpid state of the functions usually performed by the different tissues composing the viscera."

These disorders, he further observes, though little calculated to excite alarm at first, yet often lead to serious consequences in the end. The first subject of investigation is—

I. ACCUMULATIONS OF MORBID SECRETIONS AND FÆCAL MATTERS IN THE LARGE BOWELS.

Even in health a remora of the secretions and excretions takes place in the cæcum and colon—and the construction of these parts proves that such remora was designed by the Great Architect of our frame. But unfortunately this remora too frequently goes to a morbid extent, producing not only mechanical but vital mischief. Our author thinks that among the immediate consequences of this torpid state of the bowels, is the retention of the mucous secretions poured out from their follicular glands, and the accumulation of mucus in the glands themselves subsequently, and in the

ducts leading from them :—"hence the mucous follicles frequently become obstructed, distended, and subsequently inflamed and ulcerated." When, in addition to this accumulation of viscid secretions, the fæcal matters are also retained, still greater mischief ensues.

"The more fluid portions of the fæces, and of the secretions themselves, are then absorbed into the circulation, and carried either into the general current of blood, or, in the first instance, into that portion which flows into the portal vein, and which circulates through the liver. The consequences of this absorption of matters which are excrementitious and hurtful to the system may be readily inferred; and the effects it is calculated to produce upon the functions of the liver, and indeed upon the system generally, must be evidently injurious." 48.

Retention of the biliary secretion, Mr. A. observes, causes *icterus* in the slighter shades—a symptom not uncommon in tropical climates, where the liver pours out a large quantity of bile that is resorbed from the intestines into the general circulation.

"When accumulations, either of mucous secretions, or of the fœcal and other materials, or of all these combined, form in the cæcum and large intestines, the mucous follicles become obstructed, enlarged, and disposed to disease of a serious nature; the mucous tunic is impeded in the performance of its various functions; the muscular coats of the bowels become flaccid, and their irritability diminished; the accumulated materials enter into new combinations, give rise to gaseous productions, and at last degenerate into noxious matters; and thus the cæcum and cells of the colon are enormously distended by these materials, many of which have been collecting from a remote period, and by the flatus evolved from their decay and the new states of combination they are disposed to assume, from the presence of moisture, combined with a high temperature.

"The distension which frequently takes place in the colon and cæcum from these causes is often very great, and of itself productive of serious disorder. Nor is this surprising, when we consider the various connexions which the cæcum and colon have with the other abdominal viscera, and the manner in which the functions of these viscera may be even mechanically impeded by great distension of these bowels. When in this unnatural state, the cæcum and sigmoid flexure of the colon press upon the femoral nerves, and blood-vessels, the vena cava, and internal iliac veins, producing numbness, cramps, pains in the lower extremities, and even œdema, owing to the impeded return of blood through the veins. The ascending and descending portions of the loaded and distended colon press injuriously upon the kidneys and adjoining vessels, and occasion a dull aching and sense of weight in the loins, with disorder of the urinary secretion. When distension of the right flexure and transverse arch of the colon is present, the functions of the liver, the discharge of bile into the duodenum, and the states of the gall-bladder, the duodenum, and stomach, are very materially interfered with. If the accumulations in the arch and flexures of the colon be carried to their utmost, the healthy conditions of the stomach, duodenum, liver, gall-bladder, and biliary ducts, become very seriously deranged, the descent of the diaphragm is much impeded, and the disorder extended to the functions of the lungs and heart. Owing to this latter effect, together with the mechanical influence of the original cause upon the abdominal circulation, the return of blood from the head is retarded; and, as one of its most remote consequences, congestions on the brain, and effusions of serum from its membranes supervene." 49.

Mr. A. has no doubt that enlargements and other diseases of the mesenteric glands often originate in this manner—and are cured by appropriate means. When unhealthy chyle is thus formed, and excrementitious matters carried into the circulation, nutrition fails—the countenance becomes pale and afterwards sallow—the body wastes—and various disorders of the

respiratory, digestive, and nervous systems ensue, leading the practitioner to suspect organic diseases, when only functional disorder obtains. The irritation produced by these accumulations sometimes induces diarrhœa—sometimes dysentery, "frequently terminating in ulceration of the bowel." Intestinal worms, and cutaneous complaints are often produced, Mr. A. thinks, by these accumulations, as also hypochondriacal and melancholic affections.

"In respect of the symptoms *indicating a loaded state of the cæcum and colon*, it is necessary that the practitioner should be well informed. We need not acquaint the experienced observer of disease that these symptoms are very various in different cases, and that the disorder of organs remote from the seat of disease will often be the chief cause which we may have of suspecting the nature of the original derangement. In all cases, an accurate examination should be made of the abdomen of the patient, commencing with the seat of the cœcum in the right iliac region, following the direction of the colon between the top of the ilium and right ribs, across the epigastric region, and under both hypochondria to the left side and left iliac fossa. If, in the course of our examination, pain be complained of, chronic inflammation should be suspected, and its existence judged of according to the symptoms present. If there be fulness evidently existing in the course now pointed out, or in the abdomen generally, and particularly if the fulness give a doughy sensation to the hand of the examiner, we may consider that the internal surface of the bowels is lined with sordes and accumulated secretions. If more or less hardness be perceived about the seat of the cæcum, or in any part of the course of the colon or its sigmoid flexure, then the accumulation of hardened fæces should be dreaded. But even in cases where the most careful examination furnishes no proofs of the existence of morbid matters in the prima via, we are not on that account to infer that they do not actually exist. Flatulence, either of the small or large intestines, frequently prevents the examination from being so successful as it would otherwise be; and even although the internal surface of the bowels may be much loaded, yet their calibre may also be so much contracted, or at least so little distended, as to give rise to little or no sensible fulness of the abdominal regions. Besides, it often requires very considerable tact to discover this species of derangement by manual examination—a tact which can be acquired only by experience." 54.

A long continuance of these accumulations generally occasions additional symptoms, as uneasiness, sense of weight, and distension of the abdomen; together with loss of appetite, inactivity, dull pain of the loins, weakness of the lower extremities, furred tongue, drowsiness, &c.

Daily evacuations from the bowels afford no proof that the bowels are daily evacuated. Fæcal matters will lurk in the cells and flexures of the colon for weeks, months, and probably for years, although the bowels may be daily acted on. The irritation produced by these pent up matters often leads to frequent calls to stool, by which both patient and practitioner are deceived.

"Upon inspecting the stools in these cases they are generally more or less fluid, or are of a soft consistence, and apparently composed of hardened fæces, broken down amid a dark-coloured fluid. Sometimes they are nearly of a natural colour, but often brown, greenish-brown, or muddy; they are generally offensive. If in this state a gentle aperient be given the stools are frequently to appearance not much disordered—a circumstance which often misleads both the physician and the patient, and the disorder is therefore imputed to some other cause. If, instead of a gentle purgative, an active cathartic remedy be exhibited, the patient has frequent irritating calls to stool; the motions are watery, and loaded with a gelatinous mucus; and he often complains of tenesmus;—consequences which, equally

with the former, tend to mislead. In these cases, the cause of disorder is frequently overlooked, and the employment of suitable medicines either not persisted in sufficiently long to be productive of advantage, or not at all resorted to.

"In cases of the description now under consideration, much discrimination is requisite in the choice of the kind of purgative which should be prescribed. If aperients and laxatives only be employed, they are seldom sufficiently powerful to remove the accumulated matters, and frequently they do little more than procure the discharge of the more watery parts of the fæcal contents, or the excrementitious materials more recently formed. If active cathartics be prescribed, they often occasion distress, by irritating the mucous surface so far as to excite considerable action of the muscular tunics of the bowels, and to occasion a firmer retention of the accumulated matters in the cells of the colon, so that the more fluid portions of the fæces only are brought away, with the exhaled fluids and the mucous secretion which the irritating effects of the cathartic had very greatly increased." 57.

The author next adverts to the pathological condition of the bowels on which these accumulations depend. A torpid or inactive state of these viscera is connected, he observes, with debility of the frame generally, or of the bowels particularly. To this succeeds a defective secretion from the mucous membrane itself—and ultimately chemical decomposition of the pent-up matters.

"During the employment of the purgatives in cases of this description, and the persisting in the use of them for a sufficient time, it is almost surprising to observe the quantity of viscid, tenacious mucus which is brought away along with fæcal matters which have evidently been long pent up in the cells of the colon. Sometimes the stools have a gelatinous appearance and consistence, from the quantity of this kind of mucus with which they abound. At other times this substance forms only a part of the stool, the rest consisting of fæcal, offensive matters, and a watery fluid, with broken down fæces: when such evacuations are observed, the mucous is often very ropy or glairy, particularly tenacious, and always deposited at the bottom of the vessel, owing apparently to its greater specific gravity. In such instances, a stick is required to ascertain its existence, when it may be raised along the sides of the vessel by the point of the stick in one or more tenacious, glairy masses. As respects colour, these mucous evacuations vary very remarkably. Sometimes they are of a deep green, passing into a greenish black: at other times they are of a yellowish green, and of every shade to a bright orange and pale yellow." 60.

Mr. Annesley in this place hints that the gelatinous and glairy state of the evacuations has been attributed by some of his colleagues to the irritation of the purgative medicines employed—and thus the purgative plan has been impugned. But, says he, "if the purgatives occasioned the state of the evacuations which we have now described, the continued employment of them must invariably increase the quantity of mucus excreted, instead of diminishing it, and thus augment the disorder, instead of removing it." We think this inference is a very strained one. Does a disease never cease under improper treatment? The irritability of a membrane may become exhausted by repeated application of irritants, and especially of purgatives, and thus the disease may appear to be cured by means that were by no means indicated. We do not say that the purgatives were improper in the cases under consideration; but we certainly do demur to the general conclusion which our author has drawn in this place.

In the following remarks we are happy to agree with Mr. Annesly.

"Not only has this particular mucous or gelatinous state of the stools been ascribed entirely to the purgatives used, but the greenish hue of the evacuations has also been imputed to the same cause; namely, to the influence of calomel, when that particular purgative has been prescribed. That calomel actually has the effect of giving a greenish tinge to the alvine evacuations, we will not deny; but we do contend, from an experience of this remedy as extensive as has ever been enjoyed by any single practitioner, that, when it gives a greenish tinge,—whether of a very dark or of a very light hue, or of any intermediate tint,—to the alvine evacuations, the secretions poured into alimentary canal are of a morbid condition, requiring purgatives to carry them out of the system, and mercurial alteratives, or medicines operating in a similar manner, to restore the secretions to a healthly state.

"When mercurial preparations, especiallly calomel, mix with the morbid secretions lining the alimentary canal, and with the biliary and pancreatic juices, and more particularly if the bile have been detained for sometime in the gall-bladder, or have otherwise acquired greater consistence, a deeper colour, and more acrid properties, a greenish tint of the evacuations is generally remarked, the deepness and darkness of the colour depending upon the quantity of bile, and the condition of the secretions of the bowels and of the functions of these viscera generally: but this condition is less to be imputed to the particular kind of medicine prescribed, than to the morbid condition of the matters collected in the bowels on which it acts. That such is the case, is proved by the circumstance of the stools assuming a healthy character after this particular purgative has been employed sufficiently long to carry off the morbid secretions and accumulations existing in the *prima via*, and to correct the disordered state of functions whence these conditions proceed." 62.

TREATMENT. The *indications* are sufficiently obvious—namely, the exhibition of purgatives for the removal of accumulations, and the prevention of their re-accumulation by proper diet and medicines. In respect to the first indication, our author conceives that the generality of practitioners stop far short of the point to which purgation should be carried, being misled by the reports of the patients or the appearance of the stools. Whatever truth there may be in this remark, we agree with Mr. A. that the best purgatives are those which procure "a full, bulky, but not frequent evacuation of the bowels." Such remedies restore strength when it fails from the presence of fæcal matters, instead of lowering it still farther:—a consequence that often results from watery purgations.

"In many cases of long-neglected complaints of the digestive organs, the internal surface of the bowels, particularly of the cæcum and cells of the colon, become so thickly coated with a tenacious and thick secretion, giving rise to disorder of the *prima via*, or of some remote organs, as to require the continued and energetic action of those purgatives more especially which procure full and bulky evacuations, before healthy condition of the system is restored. It is precisely in cases of this description that full doses of calomel given at bed time, operate so beneficially; for this medicine produces its purgative effects, as we have already shewn, by dissolving the tenacious secretions, by promoting the biliary secretion, and by increasing the secretions of the mucous surface generally,—thus preparing the accumulated matter, and the bowels themselves, for the operation of the purgatives which may be subsequently prescribed." 67.

On this as on numerous other occasions, our author gives a preference to compound powder of jalap, the bitter aperient mixture, castor oil, decoct. aloes comp. compound aloetic pill, aided by calomel, when we want to promote the intestinal secretions as well as evacuate the bowels. Till the

stools assume a healthy character, the purgative plan is to be strenuously pursued.

"Nor should he be misled by the appearance of healthy motions from the operation of the first doses of purgatives which he has prescribed, for he shall often find that, although the stools are at first apparently natural, yet the continued operation of these medicines will succeed in bringing away morbid matters long pent up in the cæcum and cells of the colon, having a very dark and marbled appearance and putty-like consistence. In such cases, the indication is clear, and the continued action of the purgatives obviously requisite But when the stools contain the glairy, gelatinous, and viscid mucus already referred to, much more doubt is apt to attach itself to the mind of the practitioner; and he is more prone to be diverted from his object by the supposition that the state of the stools is the consequence of the purgatives employed. The source of this appearance of the motion we have already attempted to explain in the foregoing section; and even when it does not proceed from that source, it is to be imputed to the presence of some other cause of irritation in the *prima via* than the purgative prescribed." 68.

Mr. A. assures his readers that it is a most dangerous error in the practitioner to forego the use of calomel when the motions assume a greenish or spinage-like hue after the administration of that medicine, as we may be assured that the secretions of the intestinal canal, and even of the liver are in fault. Injections to facilitate the discharge of these morbid and poisonous secretions are very beneficial, as they prevent a great deal of irritation in the bowels and consequent disorder of the whole system.

But, as it sometimes, perhaps not unfrequently, happens, that the retention of accumulated matters in the large bowels depends on spasmodic contractions of the lower portions of the colon and rectum, so it will be necessary, in such cases, to use the mildest purgatives combined with anti-spasmodics, as hyosciamus, compound galbanum pill, ammonia, æther, &c.—The enemata should be of a similar kind. In many cases, also, bitters, or even tonics—and sometimes wine, are necessary at the time that we are exhibiting purgatives, in consequence of the debility which generally as well as locally prevails.

A series of cases are given by Mr. Annesley, in illustration of the observations in the text. Of these we shall only be able to insert one—and that the first on the list.

"COLONEL M—— had been some years at the Cape of Good Hope, and enjoyed tolerable good health on his passage to Madras. He suffered much inconvenience from the want of those comforts in the ship which were essential, and indeed common. It may be presumed, therefore, that these privations and annoyances called into action some lurking disease in the constitution; for he was attacked, immediately on his arrival at Madras, in 1820, with an affection of the bowels, characterized by frequent inclinations, without the power to relieve himself; the motions were sometimes constipated, at other times loose, with a dull heavy deep-seated pain in the abdomen; foul tongue; great prostration of strength, and wasting of the flesh. The pulse was good, and the skin natural; spirits very much depressed, though he was naturally a very lively man, and he had no inclination for exertion; he says that for some time past he has felt the sensation of being what is

commonly called bilious, and has taken some medicine, but he had never been under any regular treatment On examining the abdomen, there was no pain on pressure being made on the hypochondriac region or under the ribs, but there was fulness at the epigastrium, and less elasticity over the whole abdomen than in health, particularly at the cæcum, where we observed some degree of tumefaction. The tongue, he says, has been foul for a long time, particularly on getting up in the morning; and the motions, although natural to appearance, have been irregular. From the fulness and want of elasticity in the abdomen, and particularly the accumulation in the cæcum, the nature of the disease appeared quite clear, and we immediately commenced upon a purgative plan of cure —℞ Calom. gr. x.; extract, colocynth, gr. jv.; syrup. q. s. Ft. pilul h s s. Mist. purg. ℥jv.; mane sumend. These had very little effect, and what passed was not in any degree morbid.— The following pills were given :—*i. e.* pilul aloët. cum. calom et antim. tart. no. 1. three times a day; the calomel repeated at bed-time, and the purging draught in the morning.— These acted, but not fully, until they had been continued for eight days, when they began to bring away much morbid matter, viscid and tenacious, of a brown color. The same treatment was persisted in for six days longer, by which time the medicines began to act more regularly and decidedly. The pills were continued, and the bitter aperient mixture given night and morning. After these had been taken for three days longer, making altogether three weeks, the motion put on a very different appearance: they became viscid and gelatinous, of various colours, pale green, dark green, and of an orange colour, with some heavy clay-like matter which sunk to the bottom of the vessel. He had great pain in passing these motions, and particularly before the medicines acted: this induced him to believe that the remedies disagreed with him, and it was with some difficulty that we could persuade him to continue them. They were, however, continued without interruption for a fortnight longer, the patient passing the same kind of matter daily, varying, however, in colour, from jet-black to pale green, and from that to light yellow. The green stools had much the appearance of the scum formed upon stagnant water, and could be raised in the same manner by a stick. The purgatives were changed occasionally to calomel at bed time and castor oil in the morning, but the same plan of treatment was regularly persevered in. The quantity of viscid, gelatinous and tenacious matter that passed away was almost incredible. The symptoms at one time became so extremely distressing, as even to occasion faintness while at stool; but the quantity of morbid matter which was discharged, would have deterred any person who had not witnessed many similar cases from following up the purging plan, and might have been considered as the effect of the medicines. Purgatives, however, were regularly given, with the occasional variation above noticed, for ten more days, when the motions became more natural, though still viscid, and he passed them without pain; his spirits also improved, but he was exceedingly reduced in strength. The following pills were now prescribed, and the mixture continued. ℞ Pilul. aloët., hydrarg., et ipecac., nocte maneque. Repet. mist. amar. cum sennâ, ℥ij. nocte maneque. Sago, arrow-root, and wine, are allowed.

"In six days from the period at which the above were prescribed, the motions became quite natural in appearance and odour; and no more viscid, tenacious matter was discharged. The pills and the bitter aperient mixture were continued every night; his appetite improved; and from this time he recovered, but continued the medicine for another week, when one pill only was given, and the aperient every second or third day. The mineral acids and cold infusion of bark were now prescribed, and in a fortnight he was quite well, and is now in England and in good health." 75.

We shall pursue the various subjects of this second volume in succeeding articles.

Periscope;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

MODERN MEDICAL ETHICS; OR STATE MAXIMS IN MEDICINE. By PHILO-ETHICUS, *Artium Magister*, &c.

(CHAPTER THE FIRST.)

MEDICAL ETHICS (in the modern sense) must be considered the most important branch of our professional studies, because it involves the *science* of life (a knowledge of human nature) and the *art* of turning that knowledge to the greatest possible advantage. Now it is very remarkable that, although this noble science (of life,) this useful *art*, has been cultivated with great success during the last twenty years, and is now brought to the highest degree of perfection, not a line has been written on the subject, or any code of instructions put on record for the benefit of the *rising* or the *falling* generation! It appears to be what lawyers call the LEX NON SCRIPTA:—it is perfectly well understood by adepts; but hitherto it has been thought incapable of taking a tangible shape, even under the creative power of the press. We believe this is partly true; for much of the noble art is, like the *tact* or even the skill of the physician, incommunicable by words. But still we hope to shew that there are fundamental maxims in MEDICAL ETHICS which will prove useful text-books for those who are desirous of making progress in the art. Some one has said, "ars tota in observationibus"—that is, medical practice consists entirely in the treatment of single cases. So in medical ethics, the whole consists of insulated maxims founded on observation. These maxims require no particular arrangement—at least we shall give them none—but we will set them down as they occur to our recollection; and solicit the assistance of our friends in augmenting the list from time to time. We shall commence with the medical man's initiation into *practice*. With the previous education, classical or professional, we have nothing to do. There are different opinions respecting the necessity for either; and we shall not attempt to unloose the Gordian knot.

CHAP. I.

MAXIM I.

Set up your carriage. Without this symbol you cannot *get into* practice—without it, you could not *get through* practice—and without it you should not *go out* of practice. To *get into* practice, let your carriage be elegant, your liveries splendid, your horses very fast goers. If they run over half a dozen hapless pedestrians annually, and your coachman is punished by the magistrates, all the better. Even an occasional *deodand* will be a *God-send* in the way of reputation. To *get through* practice, you may slacken your pace—reduce the breadth of the embroidery on your liveries—paint your carriage but once in three years—and exchange your blood horses for common jobs. To *get out* of practice, it is not essentially necessary to put down your carriage. There are many other auxiliaries which it would be useless to mention. The process is somewhat analogous to that of parturition—it is wonderful what NATURE and TIME will do in this way!

You should never be seen lolling about in your carriage "spying farlies" out of the windows. Always appear to be making notes of your appointments; and ever and anon call out to the coachman to quicken his pace. Be sure to have an ink-stand pin-

ned in the front of the carriage, and keep the seat strewed with letters from your patients.

MAX. II.

DRESS and ADDRESS. Great attention should be paid to these, while *getting into* practice. When your reputation is firmly established, your dress may be slovenly even to malpropreté—and your *address* may be uncourteous even to rudeness, with considerable advantage. Strange as it may appear, it is yet a certain fact, that it is nearly as difficult to throw off as to acquire a well-earned fame in medicine. On the other hand, fame without a solid foundation is like a ship without ballast—liable to be upset by the first squall.

MAX. III.

Search the journals for a long catalogue of desperate cases, which you are to get carefully by heart, making them all terminate favourably under your own superintendance. With a minute retail and detail of these you are to entertain each of your patients during three-fourths of the time which you devote to the daily visit. You are also to narrate the same histories to every individual with whom you come in contact, professional or non-professional—so long as they have patience to listen to, or credulity to believe them. This maxim ranks next in respectability, and perhaps success, to the ingenious *patent one* of Dr. Eady.

MAX. IV.

Never appear at the Opera, theatre, public assembly, private party, or medical society, without a well-arranged plan of being called out—in other words—of being "particularly wanted," to attend some patient in great danger. If any noted personage can be prevailed upon to lend his or her name, as the *appellant* on such occasions, the patronage will be invaluable. The moment the call is made, you are to bustle forth, otherwise the advantage of a personal recognition may be lost.

MAX. V.

HOSPITALS and INFIRMARIES. There is now some discrepancy of opinion respecting the policy of connecting yourself with a public institution. If you are *very clever* you will hardly want such an auxiliary:—if *very much the reverse*, you may stand a chance of some unpleasant exposures. In all cases it is very proper to present yourself as a candidate—taking care to procure a long list of testimonials for the printed circular and for the public advertisement.* If defeated, you have "made yourself favourably known to the public," and are entered on the list for every future contest. If successful, a wide theatre for your talents and ingenuity is opened. As a matter of course, you become a public lecturer—and a necessary consequence is, a niche in the TEMPLE of FAME, i. e. the head of the first column in every morning newspaper. In this extended metropolis, it is essential that every facility should be given to students, who wish to attend your lectures;—and therefore the *particulars* are to be learnt, not only at the school where you teach, but at all the medical booksellers' shops—and especially at your *own residence*, which is to be carefully pointed out in the newspapers. But Besides these announcements, you are frequently to advertise your lectures on a new and specific plan. Not only are all the *diseases* on which you descant to be minutely enumerated in the advertisement; but the principal *symptoms* of these diseases are to figure in the columns of the Times, Herald, and other fashionable papers. These are your golden advertisements.†

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* There is not the slightest necessity even to announce your intention to canvass for an appointment to an hospital or dispensary, when any vacancy occurs. You have only to say that you will, *on a future occasion*, present yourself as a candidate. This is an excellent and legitimate advertisement.

† It is not necessary, nor is it at all expected, that lectures should be actually delivered by those who keep them constantly advertised. That is quite a separate concern.

You are also to publish through every possible channel, a monthly or quarterly numerical view of your public practice, according to a peculiar plan of registry of your own. The following specimen will afford you some idea of the plan.

Of one thousand patients treated at —— during the month of —— nine hundred were completely cured—75 were greatly relieved; 15 absented themselves—9 were discharged incurable—and 1 died.

In visiting out-patients of the hospital or dispensary, you should always leave your carriage or cabriolet at the door of the best house in the neighbourhood of the patient. This will well reward you for the little additional walk.

MAX. VI.

You must by all means, make a collection of diseased structures, by begging all morbid parts that your friends may meet with. It is not of the slightest importance that you should be acquainted with the histories of the cases. These specimens of *diseases*, or "BOTTLE IMPS," you are to keep ranged in the room where you see your patients, or in a neighbouring apartment, and you should take care to shew them to all your patients, telling them that these were the only cases which you failed to cure, in your extensive practice, and that they are now bottled up for the benefit of the living, as they enable you to detect diseases with unerring certainty. This is a measure of the very first importance.

MAX. VII.

Write a book—or rather get some literary hack to write it for you, and dedicate it at once, to the general reader. Medical men have neither time to read, nor money to buy, the tentative essays of their contemporaries:—address yourself therefore boldly to the whims, prejudices, fears and foibles of the public. In your book, there is no occasion to investigate principles, but only to display the superiority of your own practice. Let your work therefore be studded with desperate cases, all terminating favourably, after the first men in the profession had failed. Give no other names or places of residence except the Duke of A——, the Marquess of B——, the Earl of C——, and so on; and never descend lower than an M. P Interlard the cases with extracts of letters from your patients, describing their complaints, and the great efficacy of your medicines.—Dedicate your work to some fashionable physician or surgeon, from whom you will be sure to receive a complimentary letter that will be very serviceable on many occasions afterwards.

Supposing (which is not very likely to be the case) that you have made any useful discovery in medicine or surgery;—you are not to be such a simpleton as to reveal it openly to your professional brethren, who would instantly take advantage of it, without thanking you for your candour. No. You are to manage this point with great care and caution. A complete concealment of the remedy would subject you to the imputation of quackery;—but you may throw such obscurity about the preparation, the dose, the administration, and so forth, of the medicine, while at the same time, you dilate so amply on its miraculous efficacy, as to draw to yourself the whole practice of the remedy. If it be a piece of surgery, as straightening a crooked spine, widening a narrow channel, removing a troublesome excrescence, or, in short, performing any operation, then you are to shew that a peculiar manual dexterity, which cannot be described in words, has given you a facility and success quite worthy the attention of the public.

MAX. VIII.

If you are dubious of success, become a violent sectarian or politician. You will then be sure of employment among one party. Half a loaf is better than no bread.

MAX. IX.

THE GRAND SECRET.—The key-stone maxim on which all the great principles of medical ethics rest, has not yet been stated. It is to occupy a great portion of your nightly studies and daily avocations. You should

not move a step without it. It is to the medical practitioner what the compass is to the mariner—what the pillar of light was to the wandering Israelites. It consists in the constant habit or practice of EXTOLLING YOURSELF AND DEPRECIATING YOUR NEIGHBOUR. This is, fortunately, not only the most useful maxim, but it is that which is most easily put in execution, and has the widest field for its application. No day in the week, nor hour in the day, can pass without presenting you with abundant opportunities for working this grand engine of advancement. It has this advantage too, that it may be practised, by way of amusement, at those periods when you have no other kind of practice on hand. All your friends can assist you in this way, without opening their purses—and a gossipping female with a long and nimble tongue, may go far to make your fortune.

It is of great importance, however, that you should acquire adroitness and tact in the exercise of this leading maxim. Gross self-flattery might draw on you ridicule—and open defamation of your neighbour might draw on you the harpies of the law. Thus, suppose you are called in to dangerous case, where another practitioner has been before you. You are not to say in the presence of competent witnesses, that your predecessor had murdered, or poisoned, or ruined the patient. For doing so 500*l.* with costs, were paid not a thousand years ago. If you have a particle of expression in your countenance, you may by looks and gestures and tones, and monosyllables, effectually harrow up the feelings of the parents or friends, and convince them that the life of the patient has been endangered or lost by the practice hitherto pursued.

"Sunt verba et voces quibus hunc (vexare) dolorem."*

The less danger there is in the case, the more decidedly must you make it appear that there is now scarcely a chance of recovery—but nevertheless you will make one effort to save life. A cure performed under such desperate circumstances, will greatly spread your own fame, while it fulfils the other part of the grand maxim, by depreciating your neighbour.

In all cases, without exception, where you are separately applied to as the secondary or ternary consultant, you are to express your regret that you had not seen the case before it had gone thus far. By this expression you do not entirely violate the truth, and even if it comes to the ears of the former consultants, you may defend the expression, as one used by the very first authorities in the profession.

In consultations, and especially in this metropolis, it is necessary to be a little cautious how you express or insinuate disapprobation of your brethren—and LIONS from the country often get themselves into difficulties in this way, when first settling in London. Still, although it may not be prudent to assume any superiority on your own part, or inferiority on the part of your colleagues, you are never to lose sight of the principle, but to manœuvre so that the patient or friends may *infer* that superiority which you dare not openly *claim*. This may be done in a thousand ways, by a man of ingenuity. Thus, suppose you are called in when an acute inflammation has been subdued, or all but subdued, by active measures,

* The writer of this article is now attending the wife of a tradesman, who had been under the care of a respectable practitioner in Southwark, and who recommended his patient to go into the country for a few weeks, giving her at the same time, some prescriptions for her use. She went to a village, 14 miles from town; but not getting better, she sent for a practitioner of the place, and shewed him the prescriptions of the other gentleman. He did not mince the matter, but exclaimed at once, that she might just as well have been swallowing arsenic all the time, as the medicine she had been taking! She believed it—came back to town soon afterwards—and discarded his former medical attendant without his knowing why or wherefore! Nothing is more common than this practice.

and yet where pain, irritability, or other unpleasant feelings remain. You are strongly to insist on an anodyne, which could not have been safely prescribed before. The consequence will be a tranquil night—blessings on the new doctor and his prescription; and as a necessary corollary, a reflexion on the previous treatment.

Suppose, on the other hand, some acute or subacute inflammatory action arises in the course of a chronic and obscure complaint, and you are called in at this juncture. You are immediately to recommend moderate depletion, (the measure, in fact, which was about to be employed by the previous attendants,) the consequence of which will be, a temporary amelioration of symptoms, and a conviction, on the part of the patient and friends, that this depletive measure ought to have been long before employed. If the chronic disease, on which the acute or subacute supervened, be of a necessarily fatal nature, you are to give pretty strong hopes to the family of recovery—especially if the prior attendants had expressed their doubts on this point. The falsification of your hopes by the final event, is not of the slightest consequence. You will have injured your colleagues, mean time, in the opinion of the friends, (for the last opinion is always considered the best,) and you will have plenty of time to modify your prognosis afterwards; and, as the fatal catastrophe approaches, to fling the blame on your neighbours, by insinuating that, had more active measures been early employed, the event would have been different. This is a first-rate maxim, and is one of great power when artfully executed.

If an opinion has been given by your colleague or colleagues as to the nature or seat of the disease, you are always to give an opinion somewhat different—and take care that the parents or friends of the patient know it. If no dissection takes place, you are triumphant, because you can maintain positively that you were right, and that the others were wrong. If a *post-mortem* examination is permitted, you must still shew your skill and dexterity by making the pathology correspond with the digagnosis. Nothing is more easy than this, to a man of parts and *pretensions*. Suppose, for example, that a man dies after you had pronounced that the disease was inflammation of the brain. When the skull-cap is removed, you are to knead the brain with your fingers, in the same way that a baker kneads dough in a trough—under the pretence that you are feeling for abscesses. On prosecuting the dissection, you will find some portions of brain softened down by the above process. These you are to scrape off on your scalpel, and triumphantly show them round as portions of *suppurated brain*. It is of no consequence that there should be no injection of vessels, or other marks of inflammation. These have all disappeared before death, leaving the purulent matter to prove the correctness of your diagnosis. In short, there is no part of the body in which a fertile imagination and a good modicum of effrontery may not not easily make out traces of disease for the purpose in question. and having once found or formed these, you are to declare that it is quite unnecessary to seek for causes in any other places, when they are so evident in the place predicted before death. If a further dissection be insisted on, and more morbid anatomy turns up, you are to ridicule the idea of the latter having any thing to do with the disease. All other morbid appearances than those which suit your purpose are to be voted occurrences in the agonies of death.

II.

CASE OF SUPPOSED FATAL CARDITIS. By Mr. CORBIN, M.R.C.S. and House Surgeon to the Winchester Hospital.*

The following is an extremely interesting case, and may give rise perchance to some

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* Prov. Med. Gaz. No. II. July.

differences of opinion. It is so short that we shall give it in the words of the intelligent narrator, and subjoin the few remarks that he has added.

"The subject of this case was a female servant, ætat. 33, short and unusually muscular. From her statement, she had enjoyed good health for many years past, not being subject to rheumatism, or any other complaint. About eight weeks since, she was attacked with pain in the præcordia, which, though violent from the commencement, and continuing so for the period of three days, did not compel her to apply to any one for relief; but, from the urgency of the pain, was obliged to desist from her work, and keep at rest; at the expiration of this time she suddenly became free from pain, and felt so well, that she now resumed her former employment, and continued in good health till the 6th of February, 1829, when she was again suddenly attacked, whilst washing, with a return of her former pain, the severity of which urged her at once to seek relief, and on her application to the hospital, it was found to be accompanied with the most distressing dyspnœa, dry cough, anxious countenance, violent palpitation of the heart, and a frequent, full, and peculiar jerking pulse. She was immediately bled to syncope, blistered, and the powder of colchicum, in four grain doses, ordered every six hours, from which means she obtained great relief to all her distressing symptoms. On the 11th, the symptoms being still present, though in a subdued form, she obtained a recommendation, and was admitted an in-patient under the care of Dr. Crawford, who ordered her to be bled; but as it was found that the catamenia were at that time flowing freely, the bleeding was postponed. The next morning, February 12, she was found lying tranquilly on the right side, free from pain, but still labouring under dyspnœa, with a very frequent and jerking, though regular pulse. A saline draught, with ten minims of tincture of digitalis, was ordered every six hours, and a purgative draught to be taken immediately. On the following morning she continued free from pain, the catamenia still present, but about midnight all her former symptoms returned, and, on visiting her the next morning, February 14, she was found crouching on her knees in bed, with her head drawn down between her thighs, complaining of great pain all over the left side of her chest, and the pulse beating from 140 to 150 in the minute, full and jerking. The catamenia ceased a little before the recommencement of her pain She could not lie down in bed in any position, without considerable uneasiness; she was ordered to be cupped immediately, and blistered, and to be bled from the arm, if not soon relieved. Two grains of the submuriate of mercury, with half a grain of opium, were also ordered to be taken every four hours; but death closed the melancholy scene before these remedies were tried.

"*The Dissection* took place about forty hours after her dissolution. On removing the sternum, old adhesions were found in various parts between the pleura pulmonalis and costalis, and about a pint of limpid serum was effused in each cavity of the chest; the lungs, though compressed, contained some bloody and frothy mucus, but were quite healthy in their structure. There was no unusual quantity of fluid in the pericardium, but in patches it was most minutely injected, giving it the most beautiful arborescent appearance. There was neither hypertrophy nor attenuation of the heart, but it was rather larger and redder than usual, and and so *exceedingly softened*, that its parietes, as well as the carneæ columnæ, could, without the *least difficulty*, be broken down between the finger and thumb. The semilunar valves, at the commencement of the aorta, were thickened and partly cartilaginous, and the internal surface of the arch of the aorta corrugated, and its coats at this part thickened. The stomach, liver, pancreas, spleen, and intestines, were healthy, as also the kidneys.

"*Remarks.*—It appeared pretty plain, from the remarkable symptoms observed in the above case, that this poor woman's sufferings were to be attributed to some disease of the heart, or of its investing membrane; and, from the morbid appearances found on dissection, I believe it to be a case of acute

idiopathic carditis; and I am also led to consider the softening and friability the consequence of inflammation seated in the muscular substance of this organ. It is difficult to distinguish, in practice, between inflammation of the pericardium, and inflammation of the substance of the heart; fortunately, however, it is of no practical importance; though, had the inflammation originally been situated on the pericardium, in this case, from the acuteness of the attack, there would, in all probability, have been effusion of lymph into its cavity, or adhesion to the heart. This highly dangerous affection occurs most frequently in connexion with acute rheumatism, but it may also supervene upon any other febrile attack, or it may come on, as in the above case, in an idiopathic form, without any previous disorder."

Whether the above was really a case of carditis, or inflammation of the substance of the heart, we do not profess ourselves competent to decide. The preternatural bulk and redness of the organ are certainly appearances that might reasonably enough be referred to inflammation, but what shall we say to the softening? Laennec, who particularly describes this condition of the heart, does *not* regard it as the sequence of inflammation, and cites some very powerful arguments in favour of his opinion. We recommend our readers to peruse the chapter in Laennec's work on this subject, and we think that when they have done so, they will find their belief, if they had such, in the inflammatory origin of softening to be somewhat shaken.* We do not profess to account for the pain experienced in the præcordia, but we venture to say that it is neither essential to the existence of carditis, nor that of carditis to it. Every practitioner must have witnessed cases of the most severe pericarditis unaccompanied with pain, strictly speaking, though an almost inexpressible anguish generally accompanies the acute cases. In the present instance the effusion into the pleuræ and the state of the lungs are pretty good indices that disease of the heart was going on independent of any occasional inflammatory attacks that might be kindled up.

* Softening of the substance of the heart is not enumerated by Dr. Baillie among the anatomical characters of carditis.—*Rev.*

III.

CASE OF ARTIFICIAL ANUS OPENING INTO THE VAGINA; NEW MODE OF TREATMENT. BY M. CASAMAYOR.*

On the 3d of March, 1826, M. Casamayor was requested to see a female, 42 years of age, residing in a village of the canton of St. Mary in the Lower Pyrennees. After six natural labours, she had been brought to bed on the 4th of May, 1822, about the fifth month of her pregnancy. The pains were violent, the loss of blood considerable, and ten minutes after the expulsion of the fœtus, there issued from the vagina a fold of intestine, along with the placenta and much coagulum. The portion of gut extended down to the middle of the thighs, soon inflamed throughout its whole extent, and finally sloughed at the most depending part, whence extremely fetid stercoraceous matters escaped. A village surgeon was sent for, but not being able or willing to come, the patient, with the object of compelling the fæcal matters to resume their proper channel, tied a ligature round the protruding intestine, as high as she could get at it. On the sixth day the strangulated gut sloughed off, and for twenty days afterwards fæcal, bilious, and mucous matters, occasionally blood, and pus in great quantity were passed by the vagina. The patient at first was extremely reduced, but at length she gradually plucked up her embonpoint, although the fæces were always voided per vaginam, the operation generally occupying about a quarter of an hour, and occurring two hours and a half after a meal.

* Journ. Hebdomad. No. 13.

Sometimes once a month, sometimes once in two months, some excrement, resembling well-chewed liquorice root smeared with white of egg, made its exit from the anus.

Such was the account which M. Casamayor received, and he next proceeded to institute a local examination. The mucous membrane of the vulva and inferior half of the vagina was yellowish, wrinkled, thickened and almost cartilaginous in several points. About an inch from the neck of the uterus, the vagina presented a considerable stricture, immediately beneath which was a circular opening, sufficiently large to admit the end of the forefinger, and giving issue to soft fæces, in the posterior part and left side of the passage. Having introduced the left forefinger into this opening, and the right into the rectum, they were found to be separated from each other by a fleshy, moveable mass, of the thickness and consistence of an ordinary umbilical cord. This cord, *cordon*, descended from the left iliac region in a serpentine manner and terminated at the inferior edge of the intestino-vaginal opening. In order to ascertain yet more clearly, whether any communication existed between the rectum and the upper part of the intestine, an enema was administered, but it all returned in the course of ten minutes by the anus, not a drop escaping through the vaginal aperture.

From these particulars M. Casamayor reasonably enough concluded, that the intestine which had protruded through the laceration in the vagina was the ileum—that the protruding portion having sloughed off under the ligature, the two extremities in contact with the vaginal opening had united in that situation, in consequence of inflammation—and lastly, that the upper extremity of the gut had remained pervious to the issue of fæces, whilst the lower had degenerated into a consolidated cord.

After much hesitation, and a delay of upwards of a year from his first visit, our author was prevailed on to attempt some operation, in order to release the patient from her dreadful malady. His object was to establish a communication between the ileum and rectum, above the artificial opening in the anus, so that the fæces might find a ready passage by the former.

He provided himself with steel forceps having separate branches. The forceps was about ten inches and a half in length; the branches, which are distinguished by the terms male and female, were cylindrical, the diameter of a thick writing quill, and curved for about three quarters of their extent. The surfaces which looked towards each other were concave, and comprised between them an oblong space nearly eight inches long, and an inch and a quarter broad, where the utmost separation was effected. They terminated insensibly; on the one hand—in a plane, oval (bite) *mors* grooved crossways, eight lines in its long diameter, corresponding to that of the instrument, and four in its short or transverse diameter; on the other hand—in a straight prolongation, two inches and a half in length, flattened from within outwards, three lines in thickness and five in breadth.* The prolongation of the female branch presented in the direction of its length three holes, situated eight lines from each other and adapted to receive three nails fixed in the corresponding parts of the prolongation of the male branch. At the distance of an inch from the prolongation (*à un pouce du prolongement*) the two branches became thicker, and in the centre of this enlarged part of the female branch had a hole, and the male a worm, through which passed a screw, for the purpose of approximating the two and graduating the pressure. The *mors* of the forceps were covered with a fine skin as well as the part of the branches comprised between them and the screw. Such is the description of the instrument, translated as well as our comprehension of the French technical terms would permit.—Though we candidly confess our inability to

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* It seems evident to us that the *mors* answers to the ordinary rough part of the common forceps, and the *prolongement* to the handle.—*Rev.*

understand some of the minor points, yet we see sufficient to enable us to recognize a great similarity between the present instrument and that invented by M. Dupuytren for the treatment of artificial anus. But this by the way.

On the 21st of April the patient was restricted to barley-water and lemonade and several injections were thrown up the vagina. On the next day the instrument was applied. The patient being placed in a convenient position on the bed with the thighs held apart, the forceps were smeared with cerate, and the female branch held by the "prolongation" in the right hand was conducted by the left index finger into the ileum for the space of an inch, through the artificial opening. The branch thus situated was confided to an assistant. The male branch held also by the "prolongation" but with the left hand, was then introduced along the right index finger into the rectum at the same height as the female occupied in the ileum. The branches were then joined together, and given to the assistant to keep firmly in their place. M. Casamayor now introduced the fore-fingers into the rectum and ileum, and discovered that the *mors* of the forceps in either gut were placed about an inch above the artificial opening, that they exactly corresponded, and that they embraced only the walls of the ileum and rectum, the fleshy cord which intervened between them being pushed aside towards the left. Satisfied of these circumstances, the branches of the forceps were closed till pain was experienced by the patient, and secured by a T bandage.

Symptoms of inflammation of the bowels and inferior part of the peritoneum appeared in the night, but not to so high a degree as to cause any alarm. On the next day the branches were closed to the utmost possible extent, the patient bled, and the belly fomented. On the 25th the pain had almost subsided, and the fever disappeared, whilst a flow of mucous, bilious and purulent matters had taken place along the branches of the forceps both in the rectum and vagina. On the 26th, the patient was comfortable, and the instrument was taken out. The portion of the intestinal parietes included between the *mors* of the branches came away with the female, and thus established a direct communication between the cavity of the ileum and rectum. By the 1st of May the suppuration had entirely ceased, and fæcal matters passed in greater quantity by the anus than by the vagina. On examination, the opening between the ileum and rectum was found to be situated about an inch from the vaginal aperture, nearly circular, sufficiently large to allow two fingers to pass readily from one intestine to the other, and with edges apparently cicatrized.

On the 8th, the patient having recovered her strength, our enterprising surgeon endeavoured to heal the vaginal aperture, by introducing a hollow bougie into the rectum, in order that the fæces might find a free passage by the tube. The next day however, he was compelled to withdraw it, in consequence of the inconvenience it produced. On the 10th another expedient was tried, but with the same ill effects as the former, and it also was abandoned. On the 12th a third plan was had recourse to with no better effect than the preceding, and on the 13th, the fourth and last was attempted. The pain produced in the hypogastrium was so severe, that M. Casamayor determined to abandon the remainder of the cure to Nature, in the hope that she would accomplish the final obliteration of the vaginal fistula without any further assistance from art.

The patient was very well content with what had been already done, and prepared to quit St. Mary for her native village. Having exposed herself, however, naked and perspiring, to a current of cold air, she was suddenly attacked with a violent pleuro-pneumony, under which she sank in four days. No examination of the body was permitted by the parents.

The above is really a very interesting case, and although the final result was so unfortunate, the details redound to the ingenuity and perseverance of the surgeon.—It is not at all improbable that had the patient lived, the vaginal fistula would have

closed, or become greatly reduced in size. As it was, the re-establishment of the anal passage, even so far as it went, was a point of no mean importance to be accomplished in so short a space of time. The method of proceeding, was exactly similar in principle, and indeed in application to that of M. Dupuytren in ordinary cases of artificial anus, and the inconveniences so slight, that English surgeons may derive an useful hint from its perusal.

IV.

PROLAPSUS ANI TREATED AFTER THE MANNER OF MR. HEY. BY DR. MACFARLANE.

In the the last number of our respected contemporary of Glasgow, is an interesting case of prolapsus ani, occurring in one of the pauper patients of that town.

Case. W. A., shoe-maker, ætat. 54, became a district patient in the beginning of February. The gut descended for more than two inches on every attempt to evacuate the bowels, accompanied with considerable pain and tenesmus. When he remained for a few minutes in an erect position, the same displacement took place slowly, although no propulsive efforts were employed; this, however, could be prevented by pressure. The first thing projected from the anus was a circular fold of the mucous membrane of the rectum, at its verge of a livid colour and tuberculated appearance, and this was soon followed by the complete descent of the bowel and hæmorrhage from innumerable points. The recumbent posture and gentle but continued pressure for a few minutes generally effected the reduction of the prolapsus although at an earlier period it often continued irreducible for hours. His general health was much impaired, and the constant irritation and almost daily attacks of hæmorrhage, disabled him from following his employment.

"On examining the anus after the gut was replaced, the surrounding integuments were found extremely relaxed. There existed such an unnatural looseness in the attachment of the skin around the anus, to its corresponding cellular membrane, that it could be easily drawn out with the fingers in the form of one or more large flaps. Having succeeded in two similar cases, which came under my care in the Royal Infirmary, during the summer of 1826, in completely curing the disease, by cutting off the loose integuments, as recommended by the late Mr. Hey,* I determined to try it in this case. The skin was drawn as far out as possible into broad flaps, and cut off with the scissors in a circular direction, until all the superfluous integument was removed including a portion of the livid and tuberculated fold of mucous membrane which was projected from within the sphincter. The pain was trifling, and only a few drops of blood were lost. A soft compress and T bandage were applied, and he was strictly confined to bed. For a few days, a partial procidentia took place on every attempt to go to stool. He had a good deal of pain and inflammation around the anus, attended with complete retention of urine, which required the frequent introduction of the catheter. In ten days after the operation, he was able to walk about and void his stools, without any return of the disease, and in three weeks he was perfectly cured. Pressure was continued to the part for some time longer—occasional doses of castor oil were prescribed, and he was enjoined to avoid straining at stool.

"There will generally be found in obstinate and long continued forms of this disease, a great relaxation in the connexion of the rectum at its lower part, with the surrounding textures. This circumstance, although it may not be the original cause, is sufficient, in many cases, to account for the continuance of the displacement in chronic and inveterate cases, although, I believe it is generally accompanied by a diminished power of the sphincter. If the

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* "Practical Observations in Surgery, 2d edit. p. 444."

rectum, in consequence of being much irritated, as in various bowel complaints, ultimately becomes relaxed, the tenesmus, which is an invariable attendant, may so overcome the sphincter, as to give rise to a procidentia. But when, as in the case now detailed, the erect position is sufficient to cause a descent of the gut, we have grounds for believing, that besides the relaxed state of the rectum, there exists a want of power in the sphincter muscle, which part, along with the levator ani, is mainly instrumental in maintaining the rectum in its natural situation. In the cases detailed by Mr. Hey, there existed in combination with relaxation of the integuments, one or more lived tubercles at the verge of the anus, which were also removed. He expected from this operation, that inflammation of the surrounding cellular texture would be excited, the attachments of the rectum consolidated, and the power of the sphincter improved. In a majority of cases, the disease will be found to yield (although the cure is often tedious and protracted) to the local applications and internal remedies usually employed. Should it continue, however, as sometimes happens after the exciting cause has been removed; we will occasionally find that the loose state of the skin around the anus, and the relaxed attachments of the rectum, at its termination, become the primary causes of the continuance of the disease. It is, I conceive, in such circumstances that this simple operation may be beneficially adopted."

The case and remarks appended are practically interesting.

V.

ON THE SOUNDS PRODUCED BY THE ACTION OF THE HEART. By DAVID WILLIAMS, M. D. Physician to the North Dispensary, Liverpool.*

Every one at all conversant with auscultation is aware that a double sound is heard in the region of the heart;—the first somewhat prolonged, dull, accompanied with a stroke more or less powerful against the ear or the cylinder, and synchronous with the pulse at the wrist; the second following so hard upon the first as almost to seem like its echo, shorter, clearer, attended with little or no impulsion, and not in correspondence with the arterial pulse. After this second sound there is an interval of repose, broken by the recommencement of a similar order of phenomena. M. Laennec attributed the first to the systole of the ventricle, the second to that of the auricle. Mr. Turner in the third volume of the transactions of the Medico-Chirurgical Society of Edinburgh endeavoured to overthrow this explanation of M. Laennec's, though he perfectly admitted the correctness of his observation respecting the rhythm of the two cardiac sounds. Mr. Turner allows that the first sound corresponds with the systole of the ventricle, but that the second is produced by that of the auricle he conceives to be inconsistent with the nature of the action of the heart, as ascertained by physiologists, from the inspection of that organ in living animals. The order of events according to to M. Laennec is, first the systole of the ventricles, then that of the auricles, and after the *latter* the diastole or period of repose; whereas the experiments of the *vivisectors* place the contraction of the auricle first, and the diastole of the heart after the systole of the *ventricle*. Lancisi supposed that the contractions of the auricles and ventricles were synchronous with each other, and Mr. Turner believes that "the succession of the motions is at all events so instantaneous that is difficult to distinguish them from each other."

In accordance with this opinion Mr. T. concludes that in applying the ear or the hand to the thorax, the contraction of the auricles either is not evident to the senses, or is perceived so continuous with that of the ventricles that the two communicate only one sensation. But how then to account for the second sound which is heard

* Edin. Med. and Surgical Journ. No. CI. Oct. 1829.

on applying the ear? The gist of Mr. Turner's explanation is conveyed in the two following propositions:—1st, "Whether it can be accounted for by the impulse occasioned by the falling back on the pericardium of the relaxed heart in its diastole, after it has been elevated or moved from its place in the systole?" 2ndly, "Whether the expansion of the ventricles immediately after their systole may not contribute in addition to the falling back of the heart?" Both these propositions are so purely hypothetical, and we may add so repugnant to all just physiological reasoning, that we shall not expend our time in controverting them; they fall by their own weight.

Dr. Williams though opposed to Mr. Turner's conjectures, is yet so far staggered by his arguments as to believe that the second sound is not what Laennec imagined it to be, the product of the auricular contraction, but dependent on some other cause. Williams believes that the systole of the auricle immediately precedes that of the ventricle and that the sounds of the two are blended into one, and also that the diastole succeeds the ventricular contraction. But how then, to repeat our former question, to account for the second sound? Dr. Williams enters into the following explanation which we transcribe entire, as it cannot well be abridged.

"As the cause which I imagine to produce the sound in question, appears to warrant a somewhat different explanation of the action of the heart, to what has hitherto been suggested by any physiologists whose writings I have perused, I shall make a few observations on the internal appearance and structure of the cavities of this viscus, so as to enable me to explain the ideas which I entertain on the subject more clearly. In examining the interior of the cavities of the right side of the heart, we cannot but be struck with the difference observable between the smooth and uniform surface of the sinus venosus and the reticulated appearance of the auricula. When we contemplate this very marked difference with reference to its purpose in the economy, we must conclude the fleshy fasciculi of the auricula to be calculated for much greater latitude of action than the slightly muscular and even parietes of the sinus venosus. In confirmation of this, if we can rely on the testimony of the eye and touch, we find the contraction of the auricula to be sudden and decidedly distinct from that of the sinus venosus, and also to be much more obvious. To the eye every muscular fibre of the auricula when it contracts is apparently thrown into the greatest degree of action, and appears as if it were contracted to the utmost; to the fingers it also feels as if the opposite sides were brought completely into contact. On the contrary, the action of the sinus venosus seems to the eye to be extremely limited, to be apparently a continual movement; and the touch detects no sudden and active contractions like those of the auricula, nor any thing like an approach to contact of its opposite sides. From this, then, it appears, that the auricle (I mean the cavity as including the sinus venosus and auricula,) when the auricula contracts does not empty itself completely of the blood which it contains; and further, that only the auricula can be said to contract actively. A somewhat distant resemblance is observable between the internal surface of the ventricle and that of the auricle. In the ventricle we have a smooth and also a reticulated surface. The smooth and equal channel, which leads towards the arterial orifice, may be compared to the uniform surface of the sinus venosus, and again, the columnæ carneæ to the musculi pectinati. As the auricle most probably propels only a part of the blood which it contains into the ventricle at each contraction of the auricula, it is not unreasonable to suppose that the ventricle likewise propels only a portion of its blood into the artery at each systole. Since then a quantity of blood is probably left after each systole, we may I think infer from the uniformity of the surface of the channel leading towards the arterial orifice, that this channel is the principal lodgment of the unexpelled blood.

"The valves of the auricular and arte-

rial orifices of the heart, although they exercise similar offices, yet in their mechanism differ materially; and if we may judge from the properties of their respective structures, we may, I think, infer the immediate power by which they exercise their offices to be partially of a very different nature. The semilunar valves are simple membranous folds, and consequently exercise their offices independently of any contractile property inherent in themselves;—they are closed and opened by the direct impulse of the alternate currents of the blood. Their action may therefore be considered to be as purely a mechanical one as any in the body. The auriculo-ventricular valves are likewise membranous folds, but they have inserted along their fringed edges the tendons of the musculi papillares. As the latter form a part of the valvular apparatus, and have inherent in themselves the principle of motive power, the valves of the auricular orifices must necessarily exercise their office in a different manner from those of the arterial orifices. The contractile property inherent in the structure of the auricular valves has I think engaged but little of the attention of physiologists, since their action seems to be regarded as equally mechanical as that of the semilunar valves. The musculi papillares appear to be considered as processes having little or no action,—as in fact nothing more than a stay to prevent the valve when shut from being pushed into the auricle, for the valve is assumed to be opened by the impulse of the blood in its passage from the auricle into the ventricle. Mr. John Bell, in explaining the manner in which he supposes the function of the auricular valves to be exercised, states, that 'the valves fall down easily when the blood goes down through them, and they rise readily and quickly whenever the blood gets behind them.' And he adds, 'the auricle by its action lays down the tricuspid or auricular valve and fills the ventricle.'* In these extracts it is evidently implied that the auricular valves are both opened and closed solely by the impulse of the blood. That the auricular valve is closed solely by the impulse of the blood cannot be doubted; but, with every deference, I certainly must differ in opinion with respect to the power which opens it. As we cannot observe the manner in which the auriculo-ventricular valves perform the valvular office, I must beg particular attention to the state we find them in; to the appearance of the musculi papillares; and to their probable condition at the moment when the systole of the heart is terminating. In examining the inner surface of the ventricular cavity, we see the valve descending contiguous to the sides of the ventricle, and we find the chordæ tendineæ to be dense to the touch. The musculi papillares we observe to be distinct muscular columns, of different sizes, and extremely compact in their structure. From the tense state of the tendinous chords, and the total want of any other mechanism to prevent the valves from being pushed into the auricle, it is pretty evident that the valve cannot close the orifice and resist the force of the systole of the ventricle without the musculi capillares being extended. If then the musculi papillares be extended by the impulse of the blood during the systole of the ventricle, it is obvious that their extreme state of extension must be at the instant the systole is terminating.

"That the musculi papillares are subservient to the action of the auricular valves is not questioned. But those authors whose writings I have perused seem to think, as I have already stated, that they act only as a stay to prevent the valve from being pushed into the auricle; for they consider the valve itself to be opened by the impulse of the blood in its passage from the auricle into the ventricle. Now, it is evident, since the resistance must be equal to the impulse of the force applied, that the musculi papillares cannot act as a stay to the valve against the very powerful impulse which must be communicated at each systole, without being extended, and if extended, it follows that they must contract. Now, if we may judge the contraction of the musculi papillares to be

* "Bell's Anatomy, Article Heart."

any way in proportion to their size and compactness, to the strength of their tendons, and to the power of their antagonist, we shall then undoubtedly have a cause fully equal to produce the sound in question.

"My reason for supposing the closing of the semilunar valves to have little to do in causing the sound I am endeavouring to account for is, 1*st*, because they have very limited scope for motion; 2*dly*, because the power which causes the reflux of blood is simple reaction; 3*dly*, because in closing their motion must be somewhat moderated by the pressure of the unexpelled blood yet remaining in the ventricle. For these reasons I am inclined to think that the sound which results from the closing of the semilunar valves in health is so inconsiderable as to be entirely drowned by that arising from the opening of the auricular valves. It is then by the contraction of the musculi papillares that I am disposed to think the auriculo-ventricular valves to be mainly *opened;* and the stroke of the valves against the sides of the ventricles, in their rapid retraction, I conceive to be the cause of the second of the two successive successions or sounds heard in exploring the action of the heart.

"I shall now offer a few remarks on the action of the heart. From what I have already stated, it appears to me, 1*st*, That the auricula is the only portion of the auricle which contracts actively; 2*dly*, That the contraction of the sinus venosus is very limited, and of a passive nature; 3*dly*, That the auricle and ventricle expel only a part of the blood which they respectively contain at each contraction; 4*thly*, That the principal lodgement of the unexpelled blood in the auricle, when the auricula contracts, is the sinus venosus, and in the ventricle, at the termination of the systole of the heart, the channel which leads to the arterial orifice. Let us suppose the right ventricle to be contracting, the blood it contains being strongly pressed raises the tricuspid valve, and its divisions shut the auriculo-ventricular orifice; also it opens the semilunar valves, and a wave of blood passes into the artery. At the instant the contraction of the heart is ceasing, the semilunar valves are in the fossæ valsalvæ, the tricuspid is closed, and the musculi papillares, in resisting the pressure of the blood from pressing the valve into the auricle, are in a state of extension. At the same moment that the contraction of the heart is ceasing, the musculi papillares contract, and by their contraction open the tricuspid valve. Likewise, as soon as the reaction of the artery causes a reflux of blood towards the ventricle, the semilunar valves are raised and closed by the pressure of the blood. If we may judge from analogy, there can be no doubt but that the retraction of the auricular valve is extremely rapid, consequently it must draw along with it a portion of blood from the auricle into the ventricle; and further, the blood lodged between its surface and the sides of the ventricle must be forcibly impelled towards the interior of the cavity. What quantity of blood may be drawn into the ventricle at each contraction of the musculi papillares is a question of no easy solution. However, the resistance which otherwise would be opposed to the passage of the blood from the auricle into the ventricle must be materially lessened by the effect produced by the retraction of the valve. It may be asked, how far the influence of the retraction of the musculi papillares affects the circulation? The effect produced by the retraction of the valves is certainly a source of actual power, that is, motion is generated. Though we cannot ascertain the quantity of blood drawn into the ventricle at each contraction, yet I think we may infer the influence of its operation to be strictly local; for, from the pressure with which the blood is pressed towards the auricle, it appears to me to be very evident that the blood-vessels are in need of no aid to assist them in returning the blood into the sinus venosus; therefore, under this circumstance, any aid would be superfluous. From this view of the subject, I am inclined to consider the influence of the motion generated by the contraction of the musculi papillares to be, as a power of derivation, of no greater service in aiding the vessels to return the blood into the sinus venosus, than the influence of the con-

traction of the auricula; both contributing simply to the passage of the blood from the auricle into the ventricle. Accordingly, I consider the effect produced by the retraction of the valve of the auricular orifice to be immediately subordinate to the function of the auricle. The musculi papillares, first of all, by retracting the valve, draw along with it a portion of blood into the ventricle: then another portion is impelled into it by the reaction of the sinus venosus, together with the impulse of the blood from the venæ cavæ; and lastly, to complete the requisite extension of the ventricle, the auricula contracts, and instantly, for no perceptible time intervenes, the systole of the heart follows; when again the musculi papillares contract, and so the succession goes on."

The foregoing theory is very laboured, very ingenious, and very incorrect. It is a pity that when Dr. Williams was reviewing the anatomical construction of the heart with such scrutinizing eye, he did not look at those auriculo-ventricular valves whose function he mistakes. Dr. Williams argues boldly that the musculi or papillares columnæ carneæ *open* the valves; it is rather unfortunate for him that they *close* it. Take, for instance, the mitral valve:—its two alæ are not supplied by separate packets of musculi papillares, which if so arranged might by possibility pull those two alæ asunder, and open the valve; no! one batch of the columnæ carneæ sends off chordæ tendineæ which diverge and supply *the opposite edges of either ala*, thus obviously and beautifully operating to approximate them and thereby close the valve.* This is a plain anatomical fact which Dr. Williams ought to have known, and which if known would have saved him the trouble of writing more than eight pages of close letter-press to prove his error. The mistake is so palpable that had it not been made by a writer of Dr. Williams's celebrity we should never have thought it worth correction. As however his authority might lead some astray we have thought it our duty to strangle the misconception in embryo, lest it should grow into a mischievous maturity. It is needless to observe that the foundation being thus withdrawn from beneath its feet, the whole series of speculations falls at once into the abyss of nothingness. We have only in conclusion to express our belief that the second sound heard on exploring the heart is what Laennec unhesitatingly asserted it to be, that of the auricular systole, and that this belief has not yet been shaken by the arguments of Mr. Turner or the theories of Dr. Williams.

* Even if this direct arrangement were absent, there are many unanswerable reasons for the musculi papillares closing the valve during the ventricular systole. As it is, we should only be wasting our reader's time to advance them, when the anatomy tells its own tale so clearly.—*Rev.*

VI.

Difficulty of Swallowing from Dislocation or Diastasis of the Cornua of the Os Hyoides.

Sauvages in his nosology has given the name of the dysphagia of Valsalva, to the difficulty of swallowing arising from this cause, which was first described by the latter author. Since his time Borsieri and Molinelli have recorded several cases of the affection in question, sometimes occasioned by external violence, sometimes from swallowing large morsels of food. Dr. Gio. Bat. Magna has recently published a similar case in the Annali Universali di Medicina, of Milan, for November and December, 1828, of which we shall make a short abstract.

A man of sixty, extremely meagre and flabby, whilst endeavouring to swallow a large piece of the tendon of beef, thought he felt it stick in his throat, and made many attempts to get it down without being even able to swallow his saliva. Each unsuccessful effort was accompanied with a

peculiar noise of air gurgling up the œsophagus, but respiration and the power of speech were free. Nothing could be seen nor felt about the pharynx or neck, and a bougie passed readily down the œsophagus, without encountering any obstacle or procuring any relief. The painful spot being precisely the region of the os hyoides, and no foreign body being lodged there, Signor Magna imagined that dislocation or rather diastasis of the appendices of the os hyoides itself, might be the cause of all the symptoms. He accordingly passed down behind the base of the tongue the fore and middle fingers of the right hand, and moved the os hyoides in the manner recomended by Valsalva and Sauvages, whilst the left hand was applied on the bone behind. Immediately the uneasy sensations experienced by the patient in the spot disappeared, and he was able to swallow water with ease.

Two years afterwards a similar accident happened from taking a large mouthful of hard, cold bouillie, and was remedied by similar means.

MEMOIR ON ILIAC ABSCESSES AND TUMOURS. By M. TEALLIER, M.D.

[Published by the Med. Soc. of Paris.]

Our readers will remember the Memoir of Messrs. Husson and Dance on this subject, of which we have given an ample account in this Journal. Subsequently M. Menieres brought forward several illustrations of iliac abscesses and tumours, which we also analized, together with the clinical observations of M. Dupuytren.* It is remarkable that so many cases of this disease should have been collected in the course of eighteen months or two years, although it is one which was never before described. Without denying that new diseases originate from time to time, we may fairly conclude that most of them arise from the increased cultivation of morbid anatomy and symptomatology. M. Teallier has, in the memoir before us, added four or five cases to the common stock, and as that stock is yet comparatively small, we shall give a brief account of these cases in this article.

Case 1. M. T. de Clermont-Ferrand, aged 25 years, of delicate constitution, and subject to intestinal inflammations for two years previously, took a journey of pleasure to Paris in the month of June, and there walked about very much during the first few days. On returning home one evening from the theatre, he was suddenly seized with acute pain in the right iliac fossa, accompanied by vomiting of bile. M. T. saw the patient next morning. He had passed a very bad night—was constipated—his abdomen tense and tender on pressure—pulse quick. Twenty leeches to the iliac region—poultices—fomentations—warm bath. By these means the symptoms were mitigated, and on the 3d day examination discovered an oblong tumour, the size of a hen's egg, behind and rather above the cæcum. The skin over it was shining, and it was very tender to the touch. By repeated applications of leeches, fomentations, baths, and low diet, the pain and inflammatory symptoms subsided, and the tumour entirely disappeared.

Case 2. Madam Tenaillon, 24 years of age, of good constitution, was confined in the month of March, and had a good time; but the accouchement was followed by painful colic for many days, and the lacteal secretion was impeded. An emetic was given, and augmented her sufferings. In about three weeks the patient made an attempt to walk out, but the intestinal pains were greatly exasperated, and she took to her bed. M. Teallier was summoned to her assistance. He was struck with the size of the abdomen, as well as its tenderness on pressure. No examination could be borne at this time; but by general and local bleeding the imflammatory symptoms were mitigated, and an examination was rendered practicable at the end of eight days. An

* See No. XVIII. p. 274, et seq.

oblong tumour was then discovered in the left iliac fossa, to which place the patient had usually referred the greater part of her sufferings, the size of a turkey's egg, and very painful on pressure. It appeared to be distinct from the intestine, which was felt to glide over it. In proportion as the general abdominal tumefaction subsided, the tumour became more salient. Repeated applications of leeches were made—the bowels kept open—the tumour fomented and poulticed—warm baths used night and morning. By these means the general inflammatory symptoms were entirely reduced; but no impression was made on the tumour, in which a throbbing was now felt by the patient, that caused fear of suppuration in the mind of Dr. Teallier. A seton was inserted over the tumour, and a copious drain of purulent secretion established. The size of the swelling visibly declined, and was totally gone at the end of six months.

Case 3. This was a gentleman, 56 years of age, who had led a dissolute and irregular life, and had occasionally suffered from what was considered gravel. In the month of April, 1826, he was seized with very acute pains in the right loin, extending down to the crural arch and testicle, the latter being very much retracted. There was much tenderness on pressure in the above region, and frequent inclination to make water.—General and local bleedings were employed several times, with warm baths and diluent drinks. The patient was so exceedingly fat that no satisfactory examination could be made. After fifteen days of severe suffering, he passed all at once by urine a large quantity of inodorous pus, by which he was immediately relieved—and quickly recovered. One year afterwards nearly the same train of symptoms recurred, and after many days of great pain in the right iliac region, an abscess burst while at stool, and a pint and a half of pus was discharged by the rectum. At first he was relieved, but a draining of matter continued—hectic fever came on, and the patient died. Permission to open the body could not be obtained.

Case 4. Madame Amans, aged 31 years, became pregnant for the first time in her 30th year. During utero-gestation she suffered pain in the right iliac region, which was exasperated by the movements of the child. She was safely delivered, but the placenta adhered, and was removed by the hand. The belly remained swollen and tender. At the end of a month the lochia were nearly as abundant as immediately after the accouchement, and diarrhœa came on. There was much pain in the right iliac fossa, and she walked lame on that side. A physician who was called in prescribed bark and wine. The symptoms increased and Dr. Teallier was summoned. This was seven weeks after the accouchement. The patient had kept her bed for some days. The abdomen was large and tender—the stools frequent. There was an inflammatory swelling above the right groin, which extended to the thigh and leg, in the direction of the lymphatic vessels, which were hard and tense as cords, very painful on pressure. The other thigh was unaffected at this time, but became slightly so in the sequel. Leeches were applied to the inflamed parts, and fomentations were used, with the most rigid diet. This plan was followed by a considerable amelioration of the symptoms, and the inflammation subsided in the line of the lymphatics in the course of a fortnight; but the pain in the iliac fossa was renewed with increased violence, and spread to all the neighbouring parts. Fever was lighted up, and general bleeding was prescribed, while 30 leeches were applied to the groin. Twenty leeches were twice afterwards put to the same place. The pains became concentrated in the right iliac fossa, and abandoned the surrounding parts.—There was now little doubt that the inflammation was terminating in suppuration. A tumour, the size of a fist, was now perceptible in the iliac region, hard and painful to the touch. It went on rapidly to suppuration, and was opened on the 12th of January, just above the ligament of Pallopius. There was a large discharge of pus, blood, and flocculent matters. More than a pint flow-

ed away, and about the same quantity was left, when the wound was closed for a time. On being opened again a large quantity issued forth, and this repeatedly took place afterwards. The discharge gradually diminished, and health appeared to be on the verge of restoration, when a sudden attack of anasarca came on, rising rapidly from the lower extremities over the whole body. The abscess now burst open again, and a large quantity of serum came forth. From this time all the bad symptoms subsided, and the patient was pronounced cured by the end of February.—*Journ. Gen. de Medecine.*

VIII.

CASE OF PROCIDENTIA UTERI. WITH REMARKS. By J. J. KNOX.*

E. Stivens, æt. 20, unmarried, of delicate habit, applied to Mr. Knox with a tumour in the vagina, protruding between the labia, about four inches in length, of a deep red colour, and excoriated in a high degree. She complained of general debility; great pain in the back and loins and constant bearing down sensation; much inconvenience in walking; and pain in voiding her urine which she could not retain so long as she used to do. She stated that the tumour first made its appearance three months previous to her application, that then it was small, and had gradually increased to its existing size, and that she had been much troubled with leucorrhœa. A more minute examination was now instituted. The finger could not be introduced into the vagina, nor could the os tincæ be felt, but on carefully inspecting the apex of the tumour a small foramen was discovered, which easily admitted the blunt end of a probe, and from which a red liquor, evidently the catamenial discharge, then present, was oozing. The lips of the os tincæ were completely obliterated in consequence of the swelling of the parts, and presented a circumference the size of a dollar, in the centre of which the orifice into the uterus was placed. The case was obviously one of procidentia uteri, and the complete eversion of the vagina accounted for the impossibility of introducing the finger.

Much to Mr. Knox's surprise, gentle pressure on the tumour in the line of the axis of the pelvis, the patient being placed upon her back with the hips elevated, readily effected the return of the prolapsus. Next morning a pessary was introduced, and answered the intention well in conjunction with injections of alum and oak-bark. The discharge ceased, the uterus descended no more, and the patient experienced no inconvenience from the instrument.

"Since I met with this case, I have had an opportunity of examining more minutely the state of the parts in this disease, in the body of an old woman, which I was requested to open. In her, a tumour nearly five inches in length, and nine or ten in circumference, protruded between the thighs, presenting all the external characters noticed in the above. Being anxious to have a view of the parts within the pelvis, I opened the abdomen for that purpose. The protruded vagina formed a large cul-de-sac, in which were contained the uterus and its appendages, the bladder and part of the small intestines. The parts were much altered and thickened by inflammation, and bound together by innumerable bands of new membrane, which could with difficulty be separated by the fingers. The bladder was much smaller than usual.

"The everted vagina was not unlike to skin, and when cut into was found to be nearly half an inch in thickness and remarkably hard.

"Procidentia uteri is, comparatively speaking, a rare disease in young and unmarried females. It would appear that whatever tends to relax or dilate the passages, gives a tendency to this most troublesome complaint; and hence it most frequently happens to those who have had large families, and who have been much troubled with leucorrhœal discharges. It is very trouble-

* Glasg. Journ. No. VII.

some, and not unfrequently incurable. The urine cannot be retained so long as usual, which is easily accounted for; as in the dissection related above, the fundus vesicæ was dragged along with the uterus, and retained in its new situation by membranous bands, which prevented its distention; its passage, also, along the tumour, produces excoriation and great uneasiness. In the treatment of this formidable disease, it is of the utmost importance, as soon as its nature is known, to replace, and retain the parts in their natural situation; but it not unfrequently happens, that if they have been long displaced and unattended to, it is impossible to do so, and dangerous to persist in our attempts at reduction, if great difficulty is experienced. In the dissection related above, the parts were not only altered in texture, and consequently would, if reduced, have operated as a foreign body, but were so bound down by adhesions, as would have prevented their reduction, or, if ruptured, have occasioned such a degree of inflammation as in the end would have been fatal. In old and irreducible cases, therefore, the best and only thing that can be done, is to support the displaced parts, in order to guard against their farther descent, and to protect them from injury.

"Another interesting fact derived from the above case is the confirmation of the already received opinion, that the catamenial discharge is elaborated by the uterus, and not, as was formerly imagined, by the vagina, as in this case the secretion was seen oozing from the mouth of the uterus, so that, added to those related by Morgagni, and Dr. William Hunter, it sufficiently proves that the catamenia are secreted by the uterus alone."

IX.

FUNGUS HÆMATODES IN THE FŒTUS.

In the Journal de Progrés, tome XIV, a notice of an instance of this kind is inserted by a gentleman who signs himself Tonnelé, D.C. Tubercles, it is well known, have been found in the fœtus in utero, but we certainly are not aware that any of the genuine malignant growths have been discovered, or recorded to have been discovered, at so early a stage of human existence.

On the 9th of December, 1827, M. Tonnelé was summoned to assist two of his confréres in conducting to its termination a protracted labour, in which the back of the child presented. On our author's arrival, he found that the feet had with difficulty been brought into the vagina, that the uterus was in a state of complete inactivity, and that the waters had been discharged a long time previously. By the joint exertions of all engaged the whole of the child, except the head, was delivered, but the uterus could not be prevailed on to contract, and the final extraction was only accomplished at last by means of the blunt hook introduced into the mouth of the fœtus, after the forceps had failed. The child was hydrocephalic, but what excited most attention was an enormous tumour of fungus hæmatodes, attached to the right parietal bone, and forming a kind of double head. The base or origin of this medullary tumour appeared to be seated in the osseous tissue of the cranium, which it perforated like a sieve; the dura mater was sound. The serum contained in the cranium might be estimated at about a pint, and the cerebral substance was soft, and macerated in appearance.

The mother of the child was thirty years of age; the father, eighty, but stouter and stronger than many men at sixty. Neither of the parents had ever laboured under any cancerous affection. We are satisfied from the description that the above was really a case of fungus hæmatodes, as we have witnessed several such tumours in adults, and in every case they had their origin in the cranial bones, more especially the diploè. As we before observed, we are not aware that medullary sarcoma has hitherto been discovered in the human infant prior to its entrance into "this piping world."

X.

SCIRRHUS OF THE PYLORUS AND ULCERATION OF THE STOMACH.

Mr. Waldron, of Bath, has related an interesting case of this melancholy disease, in the last number of our Midland contemporary, which deserves notice on account of one or two curious circumstances connected with it.

The patient was a Mr. Anthony, æt. 50, commercial traveller of Bath, addicted to drinking spirits, who applied to Mr. Waldron on the 2d December, 1828, with much debility, loss of appetite, uneasiness at the pit of the stomach, and frequent vomiting. The face was sunk and sallow, the pulse extremely weak, the bowels very irregular. Till within the preceding eight months he had enjoyed an uninterrupted state of good health. No fulness nor tenderness was detected on examining the abdomen, and some purgative medicines were prescribed. These, however, failing to effect any benefit, Mr. Waldron inquired further, and discovered that the sickness generally occurred from an hour and a half to three hours after eating, and that the matters brought up were dark-coloured, grumous, and more than commonly offensive; the evacuations were imperfect and scanty, and for some length of time a copious and sound stool had not been voided. Calomel and hemlock, leeches, and saline aperients were now prescribed, but without any benefit, and on the 8th of January, being informed that some difficulty was experienced in administering the enema, Mr. Waldron examined the rectum himself, and by means of the stomach-pump found that some obstruction did exist, though a quantity of hardened fæces were brought away. Shortly after this a small bougie was introduced with some difficulty, when the patient expressed himself *greatly relieved, and the sickness of the stomach quite subsided.* The bougie was gradually augmented in size, and a pill of three grains of calomel with eight of the pil. rhei comp. prescribed with surprising, though transient good effect. The patient began to sink, became furiously insane, and died on the 10th of February, the sickness never having returned since the use of the bougie.

Sectio cadaveris, 48 hours after death.—"I examined the body in the presence of Mr. G. Goldstone, surgeon, of this city. Considerable emaciation had taken place in the muscles of the extremities; on cutting through the parietes of the abdomen, an unusual depth of adipose matter was found. In the abdomen, the vessels of the small intestines appeared dark, and congested with blood. I passed a ligature in two points above the cardiac extremity of the stomach, and having divided the part between the ligatures, was proceeding to trace the stomach downwards to its pyloric extremity, when it broke, and extravasated its contents into the abdomen. I next separated the small and large intestines, following them downwards throughout their whole course. Upon laying open the stomach, the cardiac extremity appeared enlarged and thickened, and the pyloric was a complete mass of disease; at that part where a conoidal opening is formed by the termination of the stomach projecting into the duodenum, an enlargement the size of a large duck egg was found; the stomach above this enlargement was ulcerated and thickened, and appeared as a pulpy mass; at the enlargement, the calibre of the part appeared to be nearly obliterated, and below it, the duodenum was ulcerated and thickened for several inches, and exhibited the same appearance of pulpiness, and was so fragile as to break upon the slightest force being used. On cutting through the enlargement at the pyloric extremity of the stomach, the centre exhibited a schirrhous hardness; in one part, there was a dark discolouration, similar to what is seen in scirrhous enlargement of the breast, prior to its passing into the ulcerative stage; on cutting into it, a dark coloured sanies escaped, which was imbedded in a tubercular cyst. The rest of the viscera of the abdomen exhibited no morbid appearance, excepting the the colon and rectum, which were in several parts so much contracted, as to reduce the

calibre of the intestinal tube to the size of the smallest rectum bougie. In the sigmoid flexure of the colon, these contractions were very apparent, and the fæces were with considerable difficulty made to pass these points, by pressing the finger and thumb above, and propelling the fæces forward.

"When the colon and rectum were laid open, beginning above the left iliac region, the intestine appeared in many parts thickened and contracted; in other respects no morbid appearance was observed. In the head, the vessels of the brain appeared dark and congested with blood; the tunica arachnoidea was very much thickened, and had become dense and obscure; in different parts, especially on one side, deposits of coagulable lymph were observed; a larger quantity of fluid than what is common, was found in the ventricles; in other respects, the brain exhibited no morbid appearances."

As Mr. Wadron justly observes, the marked relief from the passage of the bougie, and cessation of the sickness are remarkable, and prove the intimate though mysterious consent and sympathy between the different portions of the alimentary canal. The absence of pain on pressure, though uncommon, is occasionally met with, and no necessity exits for admitting the hypothesis advanced to account for the circumstance by the author—viz. the quantity of fat in the abdominal parietes. We have seen the same absence of pain on pressure, where no such condition obtained.

XI.

CASE OF CAROTID ANEURISM WHERE THE ARTERY WAS TAKEN UP ABOVE THE TUMOUR.

This case, for which we are indebted to the politeness of Sir Jas. M'Grigor, is of so interesting a character that we hasten to publish it. It is one of a thousand instances of that zeal for science which honourably distinguishes our brethren of the medical department of the army and navy.

The subject of this very formidable disease was a free black, aged about 40 years, a creole of this colony, and was employed as a gent d'armes; tall, of a spare habit of body, and rather given to intemperance. Was admitted into the Civil Government Hospital (of which I am surgeon in charge) on the 20th February of the present year, for an aneurismal tumour the size of a pullet's egg, situated immediately above the sternal portion of the left clavicle, and so close to that bone, that it seemed to emerge from behind it, or rather from within the cavity of the chest; which rendered the taking up of the common carotid artery below the aneurism absolutely impracticable.

The poor man had an almost constant tickling cough, with severe pain of the trachea; copious frothy mucous expectoration; great anxiety of countenance; hoarseness of voice; disturbed sleep; and was rather emaciated from constant watching.

The account he gave of his case was, that he caught cold by sleeping exposed in the night air about a fortnight prior to his admission into hospital, at which period he first noticed the tumour. As there was considerable derangement of the digestive organs, the requisite cathartic medicines were given to restore their functions, and expectorants and anodynes for the cough and general irritation.

21st. Has head-ache with severe fixed pain of the left temple; considerable fever; pulse 76, tense, full, but irregular; the tumour increasing and pulsating strongly; has been three times copiouly purged. V. S. ad ℥x. mist. silinæ simp. ℥j. cum tart. ant. gr.¼, 3tiis horis. Vespere, The bleeding produced tendency to fainting, and has relieved the head-ache and fever, but the pain of the temple and other symptoms continue. From this period the tumour went on increasing rapidly until 9th March, when it had acquired an alarming size, the base occupying the space of two-thirds of the sternal portion of the clavicle, and ascending nearly four inches upwards to the angle of the jaw, so that the volume of the tumour limited exceedingly the space for taking up the artery above it—the attempting of which

I was induced to undertake from having read Mr. Wardrop's successful case in the 9th volume of the Lancet, folios 479 to 485. Seeing that no time was to be lost, as the tumour might soon burst, or the patient be suffocated by its pressure on the trachea, and that its rapidly increasing size would soon so far diminish the space for operating as to render an operation impossible, I requested a consultation of the principal medical officers of Port Louis, as well French as English, who all unanimously concurred with me in opinion that the taking up of the artery, ultra tumorem, was an advisable measure. I immediately commenced the operation in the presence of numerous medical spectators, aided by my friends Dr. Ingham, Surgeon, 29th Regiment, and Dr. Shanks Assist. Surgeon, 82nd Regiment, and Act. Chief of the Civil Medical Department. It may be observed here, that I was badly supplied with instruments, the want of which was however compensated by my able assistants. The operation was performed in a similar manner to that described by Mr. Wardrop, and consisted in making an incision of an inch and a quarter long through the integuments and platysma myoides muscle, by which the inner edge of the sterno cleido mastoideus was brought into view, greatly thrown inward and forward out of its natural position. This being drawn aside by a retractor, the incision was continued on its inner side in the direction of the carotid artery with every possible caution to avoid the superficial veins, one of which, of considerable size, crossed the neck, limiting very much my space for operating. The after part of the operation was attempted with a silver knife, as directed by Mr. Wardrop, but finding that instrument too clumsy, and depending on the steadiness of my hand, I removed the cellular substance, and exposed the sheath of the vessels, by dissecting with the forceps and scalpel, occasionally using the handle of the latter, when I found it necessary. This dissection exposed the descendens noni running on the front of the sheath of the vessels, the bifurcation of the artery, the external jugular vein at the upper angle of the incision, and a vein the size of a large crow-quill crossing the artery at the lower angle, and immediately above the omohyoideus muscle, which limited the space for taking up the artery to little more than half an inch. The sheath of the vessel was now slit open, when the artery, vein, and par vagum nerve, were seen in their natural situations.

The patient who had been very restless during the whole of the operation, suddenly raised himself up so that I was compelled to seek again for the sheath, and being unable to find the first opening, I was obliged to make a second one. An attempt was now made to pass a rude crooked aneurismal needle armed with a double ligature around the artery, in which I was foiled by the restless state of the patient. A second attempt proved more sucessful, as it passed with facility. On the ligature being laid hold of, the needle was withdrawn and on one ligature being secured the other was removed and the wound brought in contact by a simple suture and strap of adhesive plaster. The patient being now faint, a little wine and water was given and he was put to bed. It is remarkable that scarcely a drop of blood was lost during the operation (which was performed in about 25 minutes) except what escaped from the vessels, of the integuments and platysma myoides, which did not exceed a tea-spoonful.

March 10th. The patient suffered very much from dyspnœa, cough, considerable and increased frothy mucous expectoration, and difficult deglutition for several hours after the operation, but which symptoms are now much abated. Pain of the temple entirely gone; slept none in the night for which he cannot account; pulse 80, soft and full; tongue white, belly slow, the pulsation of tumour less distinct, and he feels in every respect much relieved. Ol. Ricini, ℥j Mist. Mucil. pro tusse. Vespere, well purged; Haust. Tinct. Opii. gtt. xxv.

March 11th. Passed a tolerable good night; has less cough and irritation of the trachea; suffers but little from the wound, or tumour, in which there is still pulsation, but less distinct than prior

to the operation; complains of fixed pain of the left scapula; pulse at the wrist 88, soft, tolerably full and irregularly intermittent; skin natural; but little thirst. Mist. Salinæ Simp. ℥j. Tr. Digitalis, gtt. viij. 3tiis horis. Potus Lemonade. Vespere, continues to go on well—pulse 72, no disposition to sleep. Haust. Tr. Opii. gtt. xxx.

March 12th. Passed a good night; tumour much decreased in size; and says that the pulsation has entirely subsided, neither is it to be felt. Complains chiefly of slight difficulty of deglutition (but less so than at any period subsequent to the operation) with a fulness at the epigastrium and flatulent eructation. Voice more clear and distinct; pulse 78, soft, and tolerably full, but still intermitting; no motion of bowels. Haust. cathart.; continue mixture and potus.

March 13th. Has had but one scanty stool; slept none until an anodyne was given at midnight, after which he slept well till five o'clock. Pulse 80, soft, tolerably full, and intermitting at longer intervals. The dressings being removed the wound presented no appearance of union.

14th. The aneurismal tumour is reduced to one half its original size, and does not pulsate when the patient is sitting up in bed. In the recumbent posture, however, an indistinct pulsation becomes perceptible. The patient is not sensible of any pulsatory movement in the tumour, but the wound has been painful and caused a restless night. Bitter tonic mixt. ℥j. thrice a day; pil. hyd. gr. v. h. s.

15th. A tolerable good night; bowels still confined; uneasiness of chest and epigastrium; pulse 70, soft, full, and more regular; cough diminished; expectorates with difficulty; wound less painful. Ol. ricini, ℥j. statim. Mist. mucilag. pro tusse.

16th. Bowels freely opened; all the symptoms less urgent; dressings removed; wound healthy; tumour diminishing. Contin. mist. mucilag.

17th. Tumour continues to decrease; all the symptoms less urgent.

18th. Tumour lessened; distinct pulsation perceptible at a small point on the humeral edge of the aneurism, indicative of approaching rupture of the sac; uneasy sensation of left side of chest; deglutition and cough much relieved; bowels confined. Ol. ricini, ℥j.

19th. Well purged; passed a good night; wound dressed and is nearly healed; ligature still attached; aneurismal umour as yesterday; pulsation at the point mentioned less distinct; general feelings much improved. Infus. quassiæ, ℥j. ter in die. Pil. hyd. gr. v. h. s.

20th. Goes on well. In the evening slight hæmorrhage from the wound, which, excepting where the ligature comes out, is entirely healed. Pulse much excited; general agitation and dread of approaching death. Pulsation at the point mentioned on 18th more distinct, but no where else over the tumour. Haust. ex. tinct. digital. p. gtt. xx. Tt. camph. c. gtt. xl.

21st. An indifferent night; no return of hæmorrhage; pulsation at the point specified still distinct; pulse irregularly intermitting; belly confined. Ol. ricini, ℥j.

22d. Belly relieved; considerable return of hæmorrhage at half past 10 o'clock last night, followed by chills and total cessation of pulsation at the point alluded to, but which has returned since five o'clock this morning; pulse irregularly intermitting. At 9, a. m. considerable bleeding from the wound; and at 2 and 4, p. m. bleeding recurred, but on every occasion was very easily commanded.

23d. A good night; no renewal of hæmorrhage; aneurismal tumour more distended, pulsating considerable; pulse irregularly intermitting; belly confined. Pil. hyd. gr. v. h. s.

March 24th. Slept none; bowels unopened; no bleeding; pulse 80, soft, full, and more regular. Ol. ricini, ℥j.

25th. Four copious stools; no hæmorrhage; pulse 80, soft, full, and regular; a good night, pulsation of aneurism lessened.

26th. Continues as yesterday; dressed the wound, which discharged pus slightly tinged with blood. Aneurism nearly of

same size; no pulsation perceptible. Being watchful in the evening got an anodyne.

27th. Bowels torpid; otherwise as above; ol. ricini, ℥j.

28th. Twice purged; wound dressed; ligature came away with the dressings; Aneurismal tumour appears enlarged; deglutition again difficult. Mist. mucilag. ut antea.

29th. A restless night; belly confined; tongue foul; ol. ricini, ℥j.—From this period until 3d of April, no change of importance occurred. At this date, a small abscess had formed in the course of the cicatrix, which discharged itself through the small opening left by the ligature, but by the 5th the discharge had ceased, and the opening specified finally closed.

April 6th Palpitation of the heart and throbbing in the aneurismal tumour in the night; bowels confined; haust. cathart.

7th. Purged freely; tumour painful in the night, but not pulsating. Pulse 84, soft, full, and regular.

May 28th. Since last report the general symptoms have been unimportant; the tumour gradually enlarged and threatened to suppurate, and the pointing prominence noticed on 18th March was so thin, as to cause apprehension of its bursting momentarily. The next day (29th) it gave way, discharging about eight ounces of fetid chocolate-coloured fluid. Compresses and bandage were applied to prevent the apprehended hæmorrhagy. On the 30th, these dressings, soaked with fetid discharge, were removed; there being no sanguineous effusion, and perceiving the opening of the pointed tumour to be insufficient to give exit to the corrupted aneurismal blood, I ventured to enlarge it. The incision being made, from 6 to 8 ozs. of matter similar to the above, mixed with coagula, escaped. I introduced my finger and removed a considerable quantity of coagula and tenacious lymph. In the act of moving my finger for this purpose I felt the artery, below the seat of the ligature, without pulsation, the trachea pushed considerably to the right side, the anterior surface of the cervical vertebræ, and the muscles sterno-hyoideus and thyroideus as if dissected; the sterno cleido mastoideus rounded, and as if knotty, admitting the finger to pass round it. After clearing out the sac a dossil of lint was introduced and adhesive straps with bandage applied. These dressings being removed on the following day, the lint was found covered with pus, but no discharge from the wound, which looked tolerably well. The swelling had very considerably subsided, the patient had passed a good night, breathed easier, coughed and expectorated less, and the pulse, from 106, had fallen to 80. From this period the countenance and general condition of the patient improved; and every day's visit gave additional reason to hope for his recovery. The great size of the tumour may in part be accounted for by the decomposition of blood and disengagement of gas The fetor of the matter was such that I could not remove it from my fingers for two days.

At the present period (8th June) the patient begins to walk out of doors, there is no discharge from the wound, which is on the eve of healing: all tumour has entirely disappeared from the neck, and whatsoever fate be in reserve for the patient, the aneurism at least seems to be cured.

This case, as may naturally be supposed, has excited considerable interest in this colony. All the professional gentlemen who favoured me with their presence at the operation have occasionally visited the patient since it was performed. In a future communication I shall have the honour of informing the profession of the further history of the patient.

A. MONTGOMERY,
Surg. R. N. & Surg. in charge.

Civil Goemt. Hosp. Mauritius, June 9th, 1829.

XII.

CURIOUS CASE OF ASCENDING PARALISIS; WITH THE APPEARANCES ON DISSECTION.

Case. Charles L. 35 years of age, robust

and in the military profession for 14 years, during which he had served in the Russian and Spanish campaigns, and consequently been exposed to great fatigues and vicissitudes of climate. In June, 1826, he first perceived that his legs readily bent under him, and that he could not easily raise himself up from the sitting posture. In other respects he had no complaint. In about a fortnight after this he began to feel a numbness in his feet, which gradually ascended towards the knee. But while the surface thus lost its sensibility, the muscles beneath became the seat of acute pain, which was much exasperated by pressure. He had been a month confined to bed in this state, with nearly loss of all power in the lower extremities, when he perceived a numbness invade his hands. The progress was exactly similar to that in the inferior members; and he was seen by the narrator on the 22d of September of the same year. He was now completely paralytic, excepting the tongue, the face and the neck. These last became gradually affected. He had never complained of pain in his head, nor of any part of the spine; nor did the most rigid examination detect any physical lesion in this last region. His general health was good—his intellects perfect. He attributed his disease to rheumatism, contracted during his bivouacs in Spain. He made water voluntarily, and had a daily evacuation from the bowels. He slept and ate well. The skin was nearly of natural temperature, but quite insensible to pinching or pricking.—Any pressure of the muscles, on the other hand gave him great pain, and caused him to cry out.

Frictions of lytta and alcohol were assiduously employed along the spine—ammoniated liniments were applied to the limbs, and cinchona, with wine, was liberally exhibited internally. In the course of a fortnight the sensibility of the skin began to return and that of the muscles to diminish. The power of the muscles also gradually returned, but inversely to the way in which it had been lost—namely, from above downwards. He was never able, however, to raise himself up on his feet. This amelioration continued but for a very short time, and he was soon as bad as ever. Blisters along the spine were added to the former measures. on the third of November he became suddenly incommoded in his breathing—his pulse quickened—his countenance became anxious—he had cough—the intercostal muscles seemed scarcely to move. In this state he lingered till the 7th of the same month, when he expired without any struggle.

Dissection. The spinal canal was opened throughout its whole extent. There was very little blood in the venous sinuses. The dura mater in its natural state. The pia mater was sprinkled with calcareous depositions in the lumbar region, and was finely injected. The roots of the lumbar and sacral nerves, as also the great sciatic were injected with black blood. The other nerves were very minutely examined; but nothing particular was observed. The spinal marrow was rather firmer than natural, and the same might be said of the medulla oblongata and brain. The lungs were filled with tuberculous matters, and there were some small abscesses. The heart was empty and flaccid. The whole of the abdominal viscera were sound. The muscles presented no appearance different from those of a person in health, except being more pale and flaccid.

The foregoing case will shew with what a thick veil the functions and diseases of the nervous system are veiled. What was the nature of the malady? Was it inflammatory—or was it the reverse?—*Clinique.*

XIII.

REGULATIONS OF THE APOTHECARIES' COMPANY.

"What," we think we hear our readers ejaculate in dismay, "A new curriculum from Apothecaries' Hall?" No, gentle student, not so bad as that; this is merely a resumé of the more than Herculanean labours you must encounter before you face the dread examiners, a programme of the ceremonies for 1829 published by the Petronius to the "Company," Mr. Watson.—

They are in substance the regulations which we copied into the 19th number of this Journal, page 189 et seq. but they are licked into shape and clearness for the benefit of those now commencing their professional career.

"*Regulations to be observed by Students whose attendance on Lectures commenced before January 1st*, 1829.

"The Court of Examiners chosen and appointed by the Master Wardens, and Assistants of the Society of Apothecaries, of the city of London, in pursuance of a certain act of parliament, 'for better regulating the practice of Apothecaries, throughout England and Wales,' passed in the fifty-fifth year of the reign of his Majesty King George the Third, apprise all persons whom it may concern:

"That every candidate for a certificate to practise as an Apothecary, will be required to possess a competent knowledge of the Latin language, and in compliance with the fourteenth and fifteenth sections of the said act, to produce testimonials of having served an apprenticeship of not less than five years to an apothecary, of having attained the full age of twenty-one years, and of good moral conduct.

"Candidates will also be required to produce testimonials of attendance on lectures and medical practice agreeably to regulations at different times published by the Court.

"Those whose attendance on Lectures commenced prior to the first of February, 1828, will be admitted to an examination after an attendance on one course of lectures on Chemistry, one course of lectures on Materia Medica, two courses of lectures on Anatomy and Physiology, two courses of lectures on the Theory und Practice of Medicine, and six months physician's practice at an hospital, or nine months at a dispensary.

"Those who began to attend lectures subsequently to the 1st of February, 1828, and previously to the 1st of October in the same year, will only be admitted to examination after the following course of study—viz. an attendance on one course of lectures on Chemistry, one course of lectures on Materia Medica and Botany, two courses of lectures on Anatomy and Physiology, two courses of lectures on the Theory and Practice of Medicine—to be attended subsequently to the lectures on Chemistry and Materia Medica, and to one course at least of Anatomy—and six months, at least, physician's practice at an hospital, or nine months at a dispensary; such attendance to commence subsequently to the termination of the first course of lectures on the Principles and Practice of Medicine.

"Those whose attendance on lectures commenced on or after the 1st of October, 1828, and previously to the 1st of January, 1829, will be required to produce testimonials of having attended two courses of lectures on Chemistry, two courses of lectures on Materia Medica and Botany, two courses of lectures on Anatomy and Physiology, two courses of Anatomical Demonstrations, two courses of lectures on the Theory and practice of Medicine—to be attended subsequently to one course of lectures on Chemistry, Materia Medica, and Anatomy—and six months, at least, the physician's practice at an hospital (containing not less than sixty beds), or nine months at a dispensary: such attendance to commence subsequently to the termination of the first course of lectures on the Principles and Practice of Medicine.

"*Regulations to be observed by Students whose attendance on Lectures commenced since January 1st*, 1829.

"The Court of Examiners chosen and appointed by the Master Wardens, and Assistants of the Society of Apothecaries, of the city of London, in pursuance of a certain act of Parliament, 'for better regulating the Practice of Apothecaries throughout England and Wales,' passed in the fifty-fifth year of the reign of his Majesty King George the Third, apprise all persons whom it may concern:

"That every candidate for a certificate to practise as an apothecary, will be required to possess a competent knowledge

of the Latin language, and, in compliance with the fourteenth and fifteenth sections of the said act, to produce testimonials of having served an apprenticeship of not less than five years to an apothecary, of having attained the full age of twenty-one years, and of good moral conduct; and also testimonials of having attended two courses of lectures on Chemistry; two courses of lectures on Materia Medica, Therapeutics, and Botany; two courses of lectures on Anatomy and Physiology; two courses of Anatomical Demonstrations; two courses of lectures on the Theory and Practice of Medicine—to be attended subsequently to one course of lectures on Chemistry, Materia Medica, and Anatomy; two courses of lectures on Midwifery and the Diseases of Women and Children; and nine months, at least, the physician's practice at an hospital (containing not less than sixty beds), or twelve months at a dispensary: such attendance to commence subsequently to the termination of the first course of lectures on the Principles and Practice of Medicine.

"Students are, moreover, earnestly recommended to attend Clinical Lectures, and diligently to avail themselves of instruction in Morbid Anatomy and Forensic Medicine.

"The examination of the candidate will be as follows:

"1. In translating grammatically parts of the Pharmacopœia Londinensis, and physicians prescriptions; and after the 1st of January, 1831, candidates will be required to translate portions of the following medical Latin authors—viz. Celsus de Medicinâ, or Gregory Conspectus Medicinæ Theoreticæ.

"2. In Chemistry.

"3. In Materia Medica and Therapeutics.

"4. In Botany.

"5. In Anatomy and Phisiology.

"6. In the Practice of Medicine.

"N.B.—Physicians' pupils, who intend to present themselves for examination, must appear personally at the Beadle's office, in this Hall, and bring with them the tickets, authorizing their attendance on such practice, as the commencement thereof will be dated from the time of such personal appearance.

"No testimonial of attendance on lectures on the Principles and Practice of Medicine, delivered in London, or within seven miles thereof, will render a candidate eligible for examination, unless such lectures were given, and the testimonial is signed by, a fellow, candidate, or licentiate, of the Royal College of Physicians of London.

"*Notice.*—Every person intending to qualify himself under these regulations, to practise as an apothecary, may obtain at the Beadle's office, at this Hall, (where attendance is given every day, except Sunday, from nine until two o'clock), a printed form of certificate of all the lectures candidates are required to attend, and also of the physician's practice. The Court requests the blanks may be filled up when signed by the respective Lecturers and Physicians whose lectures or practice the student has attended.

"Students are enjoined to observe, that, in future, these certificates, so filled up, will be required from candidates for examination, and that no other form of testimonials of attendance on lectures and medical practice will be admitted, except such certificates as have heretofore been received, if the same were obtained prior to the 1st of February, 1828; or such as bear the seal of a University or College, and the signature of the officer attached to such University or College whose duty it is to sign certificates of attendance on the lectures given therein.

"Every person offering himself for examination must give notice in writing, to the Clerk of the Society, on or before the Monday previously to the day of examination; and must also, at the same time, deposit all the required testimonials at the office of the Beadle.

"The Court will meet in the Hall every Thursday, where candidates are required to attend at half-past four o'clock.

"By order of the Court,

"JOHN WATSON, Sec.

"London, Sept. 1, 1829.

"It is expressly ordered by the Court of Examiners, that no gratuity be received by any officer from any person applying for information relative to the buiness of this Court."

Having before expressed our opinion on the Curriculum, few remarks are required on the present occasion. We must once more protest against the studied ambiguity with which the apprenticeship is mentioned. It is obviously left to the discretion and generosity of the master to grant or deny permission to the apprentice, to dedicate part of the long and unprofitable "five years" to attendance on the prescribed courses of lectures. Can any thing be more iniquitous than placing an unfortunate young man behing a counter for five whole years, engaged in the wholesome and intellectual employment of rolling pills and papering bottles? As the regulations stand, there is no prohibition certainly against a portion of this time being occupied in hospital and other attendance, but the mischief of it is, that such a course is not *enjoined*, is not rendered *imperative* on master and man. In London the apprentices of the respectable general practitioners have no reason to complain, for we *know*, and we speak it to their honour, that the latter afford them every possible facility and advantage in the prosecution of their studies. But laws are for the bad: the good can do without them. The great mass of apprentices in the country and many in this town, are bound by the letter and to the term of their indenture—are Serfs and Helots as long as their blindly interested masters can compel them by the Gordian shackles of the law to be so! No doubt the directors of the Apothecaries' Company have formidable prejudices and interests to contend with in any attempt at altering the apprenticeship system; but let them do what is right, and the support of the well informed members of their profession will bear them triumphantly through a more desperate struggle.

We cannot conclude without expressing our general approbation of the spirit and details of the present regulations. The Apothecaries' Company have raised themselves in public estimation by the desire they have shewn to enhance the qualifications, and of course the character, of those who are about to become members of their body. The young men who *now* pass the Hall, may step into society with the proud consciousness that their acquirements are of a stamp, far, far above that of the Apothecaries of twenty years ago.

CLINICAL REVIEW.

XIV.

WESTMINSTER HOSPITAL.

1. FRACTURE OF THE STERNUM, CLAVICLE, EIGHT RIBS, AND COMPOUND FRACTURE OF THE ULNA.—DIFFUSED INFLAMMATION OF THE SCALP—TREATED BY INCISION.

John Burkett, æt. 45, admitted October 11th, 1828, under Mr. Guthrie, was brought into the hospital in consequence of a mass of bricks having fallen upon him whilst assisting in taking down a house in St. Martin's Lane. On examination there appeared a lacerated wound of the scalp about four inches in length extending along the right parietal and frontal bones. The sternum fractured about two inches from its superior extremity, the left clavicle fractured in two places, five ribs on the right and three on the left were also broken—those on the right side were in addition separated from their cartilages near the sternum. The ulna of the right arm broken about its middle and a piece splintered off about half an inch from its proximal extremity. The olecranon laid bare, and also the external condyle of the humerus.

Pulse 60, feeble—extremities cold. ℥iss—

brandy statim. The wound on the head approximated with sticking-plaster and bandage—the figure of 8 bandage to his shoulders, and a flannel roller to his body. The edges of the wound on the elbow brought together with sutures, &c. and the arm put in splints. There is a considerable extravasation of blood extending from above the fractured clavicle to as far as the fourth rib, and also a slight wound from which a little blood oozes out.

Two hours after admission the pulse continuing feeble, some wine was given to him and continued every hour—complains but little of pain.

8 p. m. Complains of pain in his head—pulse stronger—extremities warm, omit the wine. ℞. Pil. Aper. ℈ss. statim sumend. —Mist. Purgantis, ℥ij. mane sumend. et repetantur 4tâ quaque horâ donec alvus respondet.

12th. *Mane.* Has had some sleep in the night—considerable pain in the head, respiration hurried and performed with pain. Pulse 96, full. Detrahetur e brachio sanguis ad ℥xiv — pulse 100, much reduced in strength.

Meridie. Bowels have been freely evacuated—better.

Vespere. Suffers but little pain — pulse 90, rather weak.

13th. Mr. Guthrie saw him this morning —on removing the splints from the arm it appeared swollen. Applicentur Hirudines xij—appears to be going on well.

Vespere. Bowels have been once acted upon during the day.—Repetantur Pilulæ, &c.

14th. Slept a little during the night—pulse 134, soft—skin moist. The dressings removed from the head—the wound nearly united by the first intention. There is, however, a little puffiness — the wound was therefore laid open in part of its extent.

Vespere. He answers questions sharply—pulse small, wiry—Rep. Med. Aper.

15th. He has passed rather a restless night and at times spoken incoherently.—This morning he is better—bowels freely open.

Vespere. He is become very incoherent, and is indeed delirious—restless and with difficulty kept in bed. On examining the scalp which had been shaved, it was found in a state of general puffiness causing the head to look considerably larger than usual, but without a shade of redness—it retained the mark of the finger—pulse 98, wiry.—Mr. Guthrie on examining the head, said the case was one of diffused inflammation of the cellular texture both above and below the occipito-frontalis tendon, constituting a very rare example of disease, being in fact the same as that which in other parts was frequently called erysipelas phlegmonodes. The erysipelatous flush being alone wanting and therefore shewing that it was not an essential sign of the complaint. The only practice which could save the patient's life was, he said, by incision so as to relieve the internal and external parts at the same time, by which the disturbance and the general irritation would be removed, and he recalled to the recollection of one of the gentlemen present the case of Thomas Key, treated in the hospital, 1823, and which he had published with his observations on erysipelas, in his work on Gunshot Wounds. That case he said led the way to the treatment of diffused inflammation by long incisions, and was published before any others were treated in that manner.

The present was a well-marked one of the same nature, and the only hope of safety was by a similar mode of treatment. He made two incisions in the scalp on each side of the sagittal suture—one six inches long, the other four—united them by a cross cut and added another from the ear upwards. The scalp was upwards of an inch in thickness and filled with a serous and partly purulent fluid which was squeezed out in all directions. Several arteries bled freely and were allowed to do so until he was presumed to have lost about thirty ounces of blood, when the hæmorrhage was stopped by pressure. The man became more calm. The head was directed to be fomented.

16th. The patient was restless during the night but is more composed, and sensible—and greatly relieved.—Pulse only 84 and small.—There is a manifest improvement in

the scalp. Mr. Guthrie said the imminent danger was overcome as regarded the scalp, for he considered the man would not have survived this day if any other mode of treatment had been adopted. Bowels open—to continue fomentations.

17th Has had some sleep in the night and this morning is much more tranquil—there is a discharge of healthy pus from the head.

19th. Has slept well during the night—the bowels have been very freely acted upon—motions dark coloured and fœtid.

℞. Pulv. Rhei. ℈j.

Aquæ Menth. Pip. ℥iss. statim sumendus.

He was ordered yesterday—

Quinine Sulph. gr. i.

Acid. Sulph. d. gtt. x.

Infus. Rosæ. ℥iss. ter. in die sumend.

20th. Rested well—free discharge of pus—dressed and a bandage applied — pulse 104.

Meridie. Mr. Guthrie made another incision at the back of the head and also at the side.

22nd. Free discharge of healthy pus from the head—pulse 100—rather feeble—to take nourishing diet.

From this time he continued improving—a large abscess was formed where the clavicle was fractured—it was laid open and a great quantity of matter discharged.—The elbow healed up.—The incisions on the head after a time were united.—The ribs too became firm though it may yet be counted how many were fractured. About four months ago a shell of bone of about an inch in length was thrown off the clavicle, and three months back when he was discharged, he had tolerably good use of his arms and was in perfectly sound health.

II. LACERATED WOUND IN THE BEND OF THE ARM.

Mary Norman, æt. 15, admitted August 1826, under Mr. Linn. The patient was brought in having fallen down with a jug in her hand, one of the fractured portions of which had pierced her left arm and made a deep lacerated wound in the bend immediately in the triangular space.

On removing a handkerchief which had been tied tightly across, there were two or three gushes of blood, which ceased as soon as pressure was made over the artery above. A tourniquet was applied, the wound a little enlarged downwards and cleaned — it then appeared that the basilic and median basilic veins had been divided, and from them had gushed the greater part of the blood. The median nerve was wounded, but on loosening the tourniquet no hæmorrhage ensued and it was ascertained that the humeral, radial, and ulnar arteries were uninjured—they could all be felt to pulsate by placing a finger in the wound.

The edges of the wound were brought gently together—a compress placed over, and bandage secured it. She was said to have lost a considerabl quantity of blood before she arrived. She was rather hysterical during the dressing—pulse very faint—she had two ounces of port wine and half a drachm of the Spt. Æth. Sulph.

She was taken to bed immediately afterwards, and on seeing her half an hour later she complained of great pain in her arm—she was ordered a cold lotion to the arm.

Aug. 27th. She feels but little pain in the arm—pulse 90—ordered a powder of rhubarb and calomel.

28th. The dressings were removed this morning, the wound remained closed but not healed. She complains of great pain up to her arm-pit—the whole arm is swelled and hot. A strip of plaster is put across and a large poultice ordered to be applied— pulse rather quick—tongue clean.

29th. The arm is still swelled and hot but less painful—pulse 124, small and wiry—tongue pale—bowels open.

Sept. 10th. The inflammation and fever has gradually subsided—her arm is its natural size, freer from pain and heat, but slightly hardened along the course of the vessels. She cannot supinate or straighten her arm beyond the semiflexed position, in which it has been kept since the accident—the wound is nearly healed.

XV.

WINCHESTER COUNTY HOSPITAL.*

1 VIPER BITE—SEVERE LOCAL AND CONSTITUTIONAL SYMPTOMS—EMPLOYMENT OF CUPPING-GLASSES.

John Pound, ten years of age, was brought to the hospital, on the evening of the 24th of June, with general ecchymosis and tension of the whole foot, leg, and inferior part of the left thigh, the integuments of which were polished and transparent, but not œdematous On minute inspection five distinct dental punctures were readily discerned contiguous to each other, somewhat elevated, and surrounded by an inflammatory blush—the countenance was anxious—tongue coated with a dense brown fur—pulse small, irregular, and slightly intermittent—temperature of the limb somewhat reduced. At nine o'clock that morning he had been bitten in the leg by a viper in a plantation, immediately after which there succeeded a rapid and extensive swelling of the foot and leg, extreme burning pain and tension. He had suffered much from acute pain in the epigastrium, with retching and vomiting of frothy mucus.

Mr. Henry Lyford, under whose care the patient was placed, directed a cupping-glass to be applied immediately over the punctures. A few drops of serous fluid exuded, and three small vesications appeared, when the scarificators were had recourse to, and a small quantity of blood abstracted with little or no good effect. The leg was fomented during the night, and a draught of spt. ammon. aromat. and tincture of opium in camphor mixture directed to be taken every five hours during the night, with house physic in the morning. He obtained no rest, and on the 25th the tension had extended up the thigh—temperature of the body and limb was increased—the pulse 113, and fluttering—the tongue coated with a brown fur in its centre—partially dry, and red at the edges. The aperient not having acted, some castor oil was given, but at 8, p. m. this also had failed to move the bowels. The ecchymosis and tension had now encroached on the abdomen and perineum to such an extent, that the scrotum was quite obscured—a number of minute vesications had made their appearance below the knee—the heat of the skin and thirst were aggravated, but the state of the tongue and pulse was improved. Spirit lotion was applied to the legs, and salts were prescribed every three hours till the bowels should be opened. By 8, a. m. of the 26th, the medicine had acted twice copiously. The ecchymosis, &c. had now reached the left lumbar region and commenced invading the right side of the abdomen, which was tender to the touch. The linimentum camphoræ was substituted for the spirit lotion, and the aperient was continued. From this time the unfavourable symptoms gradually subsided, and on the 1st, of July the whole extremity, though discoloured, was reduced to its natural size, and the patient made no complaint but of extreme weakness and stiffness of the leg. The following remarks appended to the case appear to be so just, that we are tempted to transcribe them entire.

"The train of symptoms which manifested themselves throughout the progress of this case, might be clearly referred to two causes; namely, the injury inflicted on some of the branches of the deep-seated absorbents, by the fangs of the viper producing, as a consequence, the local effects, inflammation of these vessels, which rapidly extended to the larger trunks accompanying the great vessels; and, secondly, the action of the poison injected into the wound producing its morbid and specific operation on the constitution, through the medium of the nervous system—the vast accumulation of serous fluid, indicated by the tension which existed from the commencement to the termination of the complaint, depending, no doubt, on a diminished and impaired action of the absorbents—the acute pain produced, exclusively, by pressure made throughout their course up the limb—the evident benefit derived by the stimulating effects of the camphor

* Prov. Med. Gaz. No. 11.

liniment on the skin—all coincide in confirming the supposition entertained respecting the pathological condition of the affected parts. Accidents of this description are certainly unfrequent within this district: some few cases, however, have occurred, the great proportion having been attended with precisely similar results as in the foregoing narrative; but when the superficial absorbents have been the more immediate seat of injury, an erysipelatous inflammation has quickly supervened throughout their course—an example of which we not long since had an opportunity of witnessing in the person of a noble earl, of robust stature, who was bitten in the fore-arm. A high degree of erysipelas almost immediately ensued, which, in the course of a few hours, extended into the axilla, producing severe constitutional irritation. These unpleasant symptoms, however, in three or four days, began gradually to decline, and, at the expiration of a week, had entirely disappeared, leaving the patient convalescent.

"We feel no hesitation in acknowledging our incredulity and scepticism respecting the frequent fatality so very commonly supposed to be the result of the bite of these reptiles, in this country at least; and indeed, our recollection fails at present in furnishing us with any well-authenticated instances of death from this cause. We do not, however, for an instant pretend to deny the possibility of such an event, but simply to state our conviction, that when death does ensue, it is the consequence of a peculiar irritability of constitution, rather than from the activity of the viperine poison. The climate of Great Britain is well known not to be, by any means congenial to the full and complete developement or perfection of the reptile species: if, therefore, it be admitted—and there appears no reasonable ground for dissent—that the virulence and intensity of the deleterious secretions of these creatures are intimately dependent on, and modified by, the vigour of their constitutional powers, but little difficulty can remain, by way of satisfactory explanation, as to the comparative inertness of the poison of the viper, indigenous to this country, when contrasted with the deadly venom of the same tribes, in more remote but less favoured regions. It has been ascertained, by actual experiment, that dogs may swallow with impunity much larger quantities of the poisonous secretions than Fontana supposed, and that, if it be kept for some length of time, it loses its accustomed acrimony.

"We subjoin the following condensed account for the information of those who may not have devoted their attention to the natural history of the viper:

"*Vipera Communis*, common viper—*coluber berus* of Linnæus. Characteristics: Maxillary bones, with poison fangs, but no common teeth—scales behind the vent divided—neck narrow—head destitute of plates—dorsal scales, oval, carinated—inferior lateral ones subangular and plain—length from two to three feet—colour, dirty yellow—a stripe on each side, of black triangular spots, and a dorsal stripe of confluent, rhomboidal spots—space between the eyes, and two spots on the crown, black—the head is broad behind—edges of the jaws covered with large scales—belly dusky, tinged with blue—scales on the belly, 142 to 148—pairs on the tail, 30 to 40—oviparous, producing from 12 to 25 young—feeds on insects, frogs, and mice—becomes torpid during the winter. It should be recollected, however, that the markings on its body depend, in some degree, upon age, sex, and season."

II. CATARACTS ALTERNATING WITH DIABETES.

The following is a very singular case, and one that would be met with incredulity, were it not guaranteed as it is, by the name of the surgeon and of the hospital.

Eliza Broomfield, æt. 15, remarkably tall and thin, was admitted with cataract in either eye. The pupils were dilated to their utmost, and the crystalline lens was evidently so augmented in bulk as to protrude through the pupillary opening; its colour was uniformly milky; the cornea unusually

glassy; the vision so completely lost that the patient could only distinguish most imperfectly light from darkness. Independent of the cataracts, there were dyspnœa, cough, and loss of appetite.

The cataracts had appeared simultaneously fourteen months previous to her admission, and had been completely formed in the surprisingly short period of twenty days. The menses had appeared at the age of eleven, and had flowed with regularity till her thirteenth year, when they disappeared. From having been healthy and robust, she now became very debilitated, increased most astonishingly in stature, and subsequently was attacked with profuse nocturnal perspirations. When twelve months had elapsed an evident amendment took place, but it proved to be temporary only, and very shortly afterwards the girl began to complain of uneasiness about the head, with vertigo, confusion, and obscurity of vision.

℞. *Infus. gent. c.* ℥j. *Spt. æth. nit.* ℥ss. *Tr. camph. c.* ℥ss. *ter die sumend. Pil. hyd. gr.* ij. *omni nocte sumend.*

These medicines were continued for upwards of a fortnight with considerable benefit, and on the 20th of February we find that, though the cough was nearly gone, the dyspnœa and appetite were worse. The dilatation of the pupils, bulging, and milky whiteness of each lens were diminished, and the patient could readily detect any substance interposed between her and the light from the window. The medicines were repeated with the addition of an aperient. On the 24th she could discern the flame of a candle at some little distance, but it was now discovered that the urine was too abundant.

"*Feb. 28th.*—The quantity of urine passed for the last four days has averaged sixteen pints daily. Its colour of a greenish yellow, and its taste strongly mellitic. Pulse 65, and feeble; appetite natural; dyspnœa not diminished; the emaciation very considerable; tongue morbidly clean; skin dry and scurfy. The cataracts are rapidly disappearing. Ordered to subsist exclusively on animal food, and to substitute the following medicines for those which the patient has been taking:

"℞. Sulph. zinci, ℥ss.

Extract. cinchonæ, ℥iss. ft. pil. xxiv. sumat ij. ter die c. haust. sequent.

"℞. Tinct. opii. gtt. vj.

Decoct. cinchon. ℥j.

Conf. aromat. ℈j. ft. haustus.

"*March 3d.*—Urine passed the two last days, thirteen pints and a half—pulse 72—the cataracts have totally disappeared, and the patient's visual powers perfect; being enabled to employ her needle with perfect ease.—Continue medicines and diet.

"*March 9th.*—Urine has decreased to nine pints—pulse 94—the dyspnœa has very much abated, and there is a decided amendment in the patient's strength. Continue.

"*March 14th.*—Urine, eight pints—pulse 88.

"*18th.* Urine, 7 pints—pulse 96.

"*25th.*—Urine, two pints, and natural in respect to colour and taste—pulse 80. The sole complaint appears to be extreme debility. The patient having regained her sight, and having been relieved of her diabetic symptoms, she became anxious to return home to her friends. She was accordingly discharged, with an injunction to come back to the hospital, should any of her former symptoms recur.

"*May 10th.*—Intense interest, as might naturally be expected, was excited with respect to the probable issue of this extraordinary case, which did not in the least subside after the departure of the patient from the house. Frequent opportunity was fortunately, afforded of enquiry concerning her from a relative who resided in an adjoining house, and who visited the Hospital once a fortnight as an out-patient. From this person, the following report was obtained, and has, subsequently been confirmed by the testimony of the mother of the patient.

"From her narrative, it appears that almost immediately (about four days) after the young woman had returned home, she began to experience a relapse of uneasiness about the head, accompanied with great obscurity of vision, which increased with such

rapidity, that, before a week had elapsed, she was in a state of utter darkness. To this pitiable condition succeeded her diabetic symptoms, but in a more aggravated form than in her previous attack together with rapid emaciation and overpowering debility. The quantity of urine evacuated for several days prior to her decease averaged at twenty pints per diem; but with the accession of these symptoms there was a complete restoration of the natural functions of the eye, which she retained most perfectly to the last moments of her existence. Her death took place four weeks after the return of the diabetes. There had been no post-mortem examination.

III. DISLOCATION OF THE CLAVICLE FORWARDS. REDUCTION AT THE EXPIRATION OF TWELVE WEEKS.

James Savage, fifty years of age, fell with his left arm outstretched in such a manner that it bore the whole brunt of the violence. Inability to raise the arm as before, and "an *intense dull swelling*, which after a time became almost imperceptible from the enormous degree of tumefaction which ensued," were the consequences of the accident. No attempt at reduction was made, and twelve weeks after the occurrence of the accident he entered the Winchester Hospital under the care of Mr. Lyford. On the superior part of the sternum was a distinct obtuse projection, exquisitely sensible when touched, and attended with slight inflammation of the integuments; this projection could readily be traced as a continuation and termination of the clavicle, though the motions of the shoulder appeared to produce no alteration in its situation. The motions in question were painful; the shoulder itself had a decided inclination forwards, and the distance between its point and the mesial line of the sternum, was shorter on admeasurement, than in the opposite extremity.

"The treatment consisted in the application of the clavicle bandage with pads under the axilla. The shoulders were drawn backwards, as far as they could be, which was not however, to the fullest extent, the patient having acquired, from his agricultural pursuits, a somewhat prominent back, so that the bases of the scapulæ were farther asunder than natural. The effect of the bandage was not that of restoring the dislocated extremity of the clavicle immediately into its proper receptacle on the sternum. This object was accomplished, in the most gradual manner, by tightening the bandage every four or five days, until the scapulæ were completely approximated.—The patient was confined in bed for three weeks on his back, which greatly assisted the bandage in its office of retaining the shoulders in the wished-for position. Moderate pressure was made by the application of soap-plaster on the dislocated parts; and at the expiration a month, the parts had acquired their original and natural situations."

IV. DISLOCATION OF THE HEAD OF THE RADIUS BACKWARDS.

It is well known that Sir Astley Cooper in his magnificent work on Dislocations has ranked dislocation under the head of the radius backwards as extremely rare. Sir Astley, indeed, if we remember right, never witnessed more than one or at most two cases of the accident in question. Since the publication of the work, however, we have reason to know that an instance or two of the kind has been shewn to the worthy Baronet, and several have been noticed at different times in this Journal. Mr. Case now communicates two further cases, which, being very brief, we shall give to our readers in the reporter's own words. The many examples of this dislocation now upon record are sufficient to shew that it is much more frequent than Sir Astley Cooper has imagined, and prove how incomplete is the greatest experience that any individual can hope to attain. It is by collecting and collating stray facts of this description that periodical literature may prove of much service to professional men and to science.

"*Case* 1. William Smith, ætat. 14, was, admitted in the month of November, 1828, on account of a disease of the tibia. On examination of his right elbow, a dislo-

cation of the radius from the ulna was discovered, which, it appeared, had been treated for an abscess, there being, on each side of the head of the bone, a cicatrix of some extent. The injury took place when the patient was an infant; he, therefore, can give no account of it. The appearances which presented themselves were as follows: The elbow was very much deformed, the head of the radius being thrown upon the external condyle of the humerus, making a large projection there; he is unable to make perfect flexion or extension of the fore-arm upon the humerus; neither is it in his power to perform the actions of pronation and supination, as there is not the least rotatory motion of the radius; and, when requested to turn his hand upwards and downwards, the whole motion is performed at the shoulder joint."

"*Case* 2. John Hewsted, ætat. 21, was admitted on the first of April, 1829, with an eruption, extending over the greater part of his body. On exposing his left arm, great deformity of the elbow-joint was observed. He gives the following account of its origin: About thirteen years ago, whilst playing at cricket, he struck the end of the bat against the ground, which accident caused immediately the present unshapely appearance of the joint. Nothing was done for him at this time, the surgeon, to whom he applied, not being acquainted with the nature of the injury.

"At the time of the accident he was able to bend the arm in a slight degree, but that motion has now ceased.

"In the year 1826, an abscess formed about the joint, which was opened. Blisters were applied at the same time, but without any relief.

"On examination, it proved to be a dislocation of the radius, rather laterally and backwards, the head being thrown upon the humerus, between its articulating surface and the extreme point of the external condyle. Perfect anchylosis of the joint has taken place, leaving the arm in the semi-flexed position, without the least degree of motion in any direction whatever."

V. RENAL CALCULI — LARYNGITIS — ABSCESS EXTERNAL TO THE LARYNX.

The following case is deserving of consideration on account of the fatal suppuration external to the larynx, a circumstance which we know to have occurred in several instances. Not very long ago it took place in a private patient of the editor of this Journal, and excited considerable interest and attention. At some future opportunity we may make some remarks on this curious affection, but at present we have not the leisure to do more than hint at its comparative frequency.

The subject of the case upon the *tapis*, was a labourer, ætat. 62, admitted with fixed, obtuse pain in the right lumbar region, occasionally aggravated into intolerable paroxysms—micturition was frequent. He attributed his complaint to a severe kick from a horse received in the flank some months previously—he had occasionally voided some blood in his urine, but never any sand or gravel. Cupping, the warm-bath, and other appropriate means were employed, when at the expiration of a fortnight, he exposed himself to a current of air from an open window, and was seized with what seemed to be a cold. Five grains of calomel were given, apparently with benefit, but he soon complained that his throat was very sore, and on inspecting the fauces, the uvula and tonsils were found to be slightly inflamed. There were no febrile symptoms, and he was merely ordered a gargle of tincture of myrrh in infusion of roses. Next morning, however, a fatal change had occurred;—the respiration was quick, laborious and impeded, with total inability to swallow or speak—the pulse was rapid and feeble—the countenance flushed and intensely anxious—the recumbent posture impossible. There was an evident external fulness and tenderness on pressure about the throat, and on examining it internally the inflammation was found to have deserted the uvula and tonsils for the epiglottis, which was seen to be highly inflamed, swollen, and altered in form; the back part of the mouth seemed also clogged with

a thick mucus. The patient was now transferred to the physician to treat the laryngitis set up, which was done by the most active antiphlogistic treatment, but without avail, for in less than forty hours from the commencement of the attack the patient died. The medicines were necessarily exhibited by means of the stomach-pump.

"*Sectio Cadaveris.* The body was inspected about ten hours after death, when the tongue, larynx, and pharynx were removed, in order that they might undergo a more accurate and special examination. The epiglottis had become prodigiously augmented in size, from serous effusions between its substance and the membrane by which it is invested; it had become likewise perfectly inelastic, convex on either side, so that its natural adaptation to the glottis was completely destroyed. The larynx and trachea on their inner surface presented evident traces of inflammation—the whole membrane being covered by florid vessels, giving a general and regular appearance of increased vascularity; but the effusion of coagulable lymph, so frequently succeeding inflammation of these parts, had not occurred. On separating the larynx from the pharynx, a large abscess was detected, containing about an ounce of heathly pus—the walls of the abscess being formed by the cellular tissue interposed between these tubes. The examination was now directed towards the lumbar region, with the view of ascertaining the exact cause of the disease for which he had been admitted into the hospital. The abdominal cavity was, therefore opened, and all the viscera, with the exception of the kidnies, found to be healthy. The right kidney contained a singular shaped calculus, the size of a walnut; it had partly emerged from the pelvis of the kidney into the commencement of the urethra, which had become prodigiously dilated. The left kidney contained a number of minute calculi; the largest not exceeding in diameter the size of a pea. The structure of each kidney was more than usually firm, and highly vascular. The ureter on the right side was more or less covered with tortuous distended veins.

"The thoracic viscera healthy—head not examined—the right kidney, with its calculus, has been preserved and placed in the hospital museum."

XVI.

HOPITAL BEAUJON.

DISCOVERY OF A NEW SPECIES OF INGUINAL HERNIA.

Such is the heading of the case, such the burthen of many preliminary observations from the reporter in the Journal Hebdomadaire.* Our readers no doubt will stare at the announcement, after all the laborious dissections and laboured descriptions that already conspire to bother the brains of our young aspirants to collegiate diplomas. But so it is, and it only remains to narrate the case that is thus destined to swell the present dread array of minutiæ in the history of hernia.

The subject, to our honour be it spoken, was an English groom, ætatis 27, admitted into hospital on the first of June, with an oblong tumour, the size of a couple of fists, extending from the left inguinal ring to the bottom of the scrotum. The skin was red and tense; pressure was painful and exasperated a fit of colic which distressed the patient; constipation; vomiting of bilious matter; small and frequent pulse; cold moist skin. He had been subject for five years to a hernial tumour in the groin, which would seem to have never entirely returned, and for which he wore no truss. On the 31st of May, after violent exertion, he experienced sharp pain in the tumour, which soon became hard, enlarged, and painful to the touch, and colic and nausea quickly succeeded. Between the first occurrence of these symptoms and his admission attempts at reduction had been made without success.

The warm bath twice repeated, bleedings from the arm, and two tobacco enemata were prescribed, but no amendment was

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* No. 40.

found on the 2nd, and the operation was performed. The sac contained an enormous mass of omentum, with a loop of intestine six or eight inches in length at its posterior part. The omentum was sound, the intestine of port wine colour, but elastic, firm, and covered with lymph. The stricture was divided directly upwards, but on trying to reduce the gut, returned as if by a rebound, and this part of the operation was only concluded after tedious, difficult and painful efforts. What was now to be done with the omentum? excise it, or leave it where it was? M. Blandin determined on the latter, and after a proper dressing, an enema, and a bleeding, the business was at length completed.

No stool, however, succeeded, (a primâ facie proof that a stricture remained,) and on the 3d, we find the patient worse in every respect. The omentum now presented blackish brown patches, and the belly was the seat of pain. A castor oil enema, thirty leeches to the abdomen, and emollient fomentations were tried in vain, for the patient continued to sink and died that afternoon.

Dissection on the morning of the 5th.—Peritoneal inflammation, with sero-albuminous effusion into the abdomen—almost the whole floating portion of the omentum in the sac; and the transverse arch of the colon dragged down, and held in contact with the abdominal parietes in the groin. On opening the inguinal canal from above, and drawing out the omentum, the intestine that had been thought to be returned, was found lying in the canal itself, and occupying a *cul-de-sac*, situated at its upper and internal part, and "formed by the hernial sac depressed on this side." In endeavouring to account for this appearance, it was quickly perceived that the protruded parts had passed out by a laceration (*éraillement*) of the fascia transversalis, situated about two lines behind and above the internal ring, or superior orifice of the inguinal passage; that having passed through this laceration they had then become lodged in the canal, and had extended both downwards to the scrotum, and upwards to the internal ring, producing by this double course a double depression or cul-de-sac in their peritoneal envelope. This disposition of the hernia explained the difficulty of reduction, as the gut during these efforts instead of passing back through the slit in the fascia, was thrust up into the summit of the inguinal passage. It also seems to us that the laceration itself through which the rupture took place could not have been divided to any extent, if at all, or the parts would still have been returned, though probably not with such ease as under ordinary circumstances.

It is evident that the above was only a species of *direct* hernia after all; not occurring, as usually happens, in the weak part opposite the outer ring, or in some other portion of the abdominal parietes, where nature or accident opens the way, but *into* the inguinal canal. Of course, there is no reason why this description of hernia, always an anormal occurrence at the best, should not take place here as well as elsewhere; but still we are not aware of any authentic or specific cases of the kind, except the present.

XVII.

BATH UNITED HOSPITAL.

[Mr. BURY Reporter.]

EXTRAORDINARY CONSTIPATION OF THE BOWELS.

Perhaps no instance of more protracted constipation than the subjoined is on record; but the pleasing satisfaction with which the case has terminated under moderate meaures steadily pursued, appears more deserving publication than the relation of the facts themselves. The case was treated by Dr. Barlow, whose kindness has supplied the writer with the circumstantial account of the earlier history and more important particulars, which is principally derived from his hospital journal, and the letters of the medical gentlemen in the country who had the care of the patient before she came to Bath.

Charlotte Councel, æt. 24, applied at the United Hospital of this city, Sept. 6th,

1828, having had no stool whatever for thirteen weeks.

It appears from her own account and the description of her case given by the practitioners who have attended her heretofore, that she has always been of a costive habit, which has, however, yielded to moderate aperients till within the last year. Prior to the time just specified, she had been in the habit of allowing many days to elapse without any motion from the bowels, and this, too, unattended by any very perceptible ill consequences at the time. In December, 1826, she was attacked with inflammation of the lungs, which was removed by ordinary remedies; and at that time there was no apparent obstruction in the intestinal tube. Soon after her recovery from this attack, a circumscribed swelling was observed in the abdomen in the situation of the cæcum, accompanied with bearing-down sensations and slight redness of the integuments. Dropsy was apprehended, but the enlargement subsided after the application of leeches and a blister, and she continued tolerably well for some months. There now came on a great disposition to indolence, with unwillingness to take exercise, so that she was accustomed to sit all day on her chair, from which nothing could induce her move. The action of the bowels became more irregular (intervals of 8 or 10 days sometimes occurring between each evacuation), and proportionally less influenced by medicine.

On the 10th December, 1827, the patient consulted Dr. Gingell, of Thornbury, where she was then resident, having passed one motion on that day, after complete constipation for five weeks.

Jan. 27th, 1828, a second stool was discharged, the patient having taken salts and senna, in moderate doses, twice a week during the intervening time (a period of seven weeks), agreeably to Dr. G.'s directions. At this time her skin was in a state of constant perspiration, which was occasionally very profuse; her urine was highly-coloured and copious. There was no pain, but frequent uneasiness, felt in the bowels; no enlargement could be discovered in any part of the abdomen, her tongue was clean and moist; pulse 80, soft and regular. She had latterly eaten no animal food, and taken only debilitating fluids, such as milk and water, in small quantittes.

A third stool was passed March 30th, after constipation for 9 weeks, consisting of hard and dry scybala, resembling burnt coal in external character, which appearance, we believe, the two previous motions also presented. Calomel and colocynth had been prescribed twice a week, with a mixture containing magn. sulphas; but these were taken very irregularly, sometimes omitted for a fortnight. Some very dark discoloration was now observed in the right hypochondrium, which part was full and hard, and afforded considerable pain and soreness on pressure. Relief was derived from the use of fomentations; and injections of water gruel were given, but no feculent matter was brought away by them.

Another small evacuation (the fourth) was produced on June 8th, an interval of ten weeks, similar to shoe-maker's wax in colour and consistence. It was composed of hard, round scybala, and other pieces of natural figure, an inch in length, and the size of the finger. A few days previous to this date, she took croton oil and cathartic extract; and a tobacco enema was administered, which was followed by violent vomiting of a dark and offensive fluid, like to walnut-catsup, and thought to be stercoraceous. This effect was supposed to have arisen from the tobacco, as she has not vomited since.

No evacuation from the bowels has taken place subsequently to the latter date, a period not less than 13 weeks. Separate combinations of calomel, jalap, and salts, and of calomel, gamboge, and aloes, have been given during the above time in doses progressively increased. The extr. elaterii from half a grain to four grains, and tiglii oleum, in four-minim doses, have been also exhibited, but without effect. The croton oil produced very violent pain of abdomen, profuse perspiration, and coldness of the extremities, each time it was administered, and was, therefore, not persevered with.

The patient is emaciated and pale, but her aspect does not indicate the existence of either severe disease or great functional disorder. She has no fever — the catamenia have always been regular, sometimes painful—the pulse is quick—tongue whitish—little appetite or thirst—skin moist —urine high coloured, but not deficient in quantity. There is no general fulness of the abdomen, which feels naturally soft. A distinct swelling, hard and firm to the touch, and causing pain when pressed, is still perceptible in the situation of the head of colon, which we may infer to have existed since March. She has lived of late on bread and milk, the amount of which in the day has not exceeded eight or ten ozs. The following medicines were prescribed.

℞. Ext. Colocynth. c. ʒj. Olei croton. gtt. iij. M. ft. pilulæ duodecim. Capt. j. 4tis horis, c. mist. sequent. ℥j.

℞. Magnes. Sulphat. ℥j. Infus, ros. comp. Oss. M. Enemata ope syringis nocte maneq.

Sept. 10th. Has taken her pills and mixture regularly and had four injections—no feculent discharge—the injections, which are of soap and water, are generally retained. Has not had sickness or vomiting—takes very little food—pulse 96—tongue moist and clean—occasional pains of abdomen. Pergat. c. medicamentis. Liniment. sapon. co. abdomini infricandum.

Sept. 12th. Ext. colocynth. co. gr. iv. Hydr. submur. gr. j. Ft. pil. 6tis horis sumenda. Contr. mist. et enemata.

13th. Medicines taken regularly; injections also used with only a few interruptions —no stool—no sickness or vomiting. States that she feels better, and thinks the bowels seem disposed to act. Pergat.

17th. One feculent stool at length obtained, after more than 14 weeks' perfect constipation. It was voided not without a good deal of pain and was quite hard and solid. Intermitt. remed. hodiè; sed cras repet. pil., mist, et enemata.

25th. Mouth affected—no stool since 17th. Six ounces of blood were taken from the arm, it being supposed that some spasmodic action in the bowels might assist in retaining the fæces—no buff. Interm. pil. et mistura. Habeat pulv. jalapæ co. (pp. Ed.) ℈j. ter die. Contin. enemat. et liniment.

Oct. 3d. Pulv. jal. comp. ʒss. ter die. Cont. cætera.

8th. A small stool this morning of a similar kind to the last. Has used the Cross-bath twice—Pergat.

25th. Another small stool yesterday.

℞. Ext. col. comp. ʒj. Ol. crotonis, gtt. iv. Ext. hyosciami, gr. xvj. M. ft. pil. xij. Capiat duas ter indies, cum mixt. seq. ℥j.

℞. Magnesiæ sulph. ℥j. Infus. ros. co. Oss. Tinct. jalapæ, ℥j. M.

Nov. 1st. Another small stool. Pergat.

7th. A stool of five scybala, round, and passed with considerable pain, and as well as the former nearly black in colour. Perg.

19th. A stool also of five scybala, but less dark—vertigo and cephalalgia. Cont. medic. Vesicat. ij. ponè aures.

Nov. 25th. A pulpy stool of some consistence. Perg.

Dec. 3. A stool of about six small balls.

℞. Extr. col. co. ℈ivss. Cambogiæ, gr. x. Tiglii olei, ♏v. M. ft. pil. xx. Sumt. ij. ter die c. misturâ.

13th. A free stool this morning—some scybala and some pulpy fæces. Rep. pil. ut prescript. Oct. 25. Cont. cætera.

15th. A stool of two scybala.

17th. Habeat pil. præscript. die 3.

21st. A scybalous stool.

23d. A pulpy motion.

27th. A large pulpy stool, making three within 10 days.

30th. Stool consisting of scybala, scanty and dark.

Jan. 6th, 1829. A stool, scanty but pulpy.

8th. A stool, composed of scybala.

13th. A stool, pulpy and more copious.

15th. A stool of same character; and on 22d also a full pulpy motion.

Feb. 14th. No account has been kept since last report of the number of stools, which have been more frequent and are much improved in character, under the continued use of purgatives, in nearly as large quantity.

The patient to-day left Bath for the coun-

try, and did not return till June 23d, looking much better and having gained flesh. At her departure, we believe she had lost every appearance of health, as was to be expected; but the constitution, throughout the treatment, bore up almost marvellously against her ailments.

She brought with her the following report of the motions from her bowels during her absence. Feb. 22d, a stool; 28th, a stool. Between these two dates she suffered much in her head, being at times deprived of her senses. The bowels did not act again before March 22d; but on the 26th, 28th, and 30th, she passed a motion each day. During the month of April she had stools on the 1st, 2d, 5th, 6th, 8th, 11th, 14th, 17th, 22d, 24th, 25th, and 26th. On the following days in May, viz. 1st, 2d, 3d, 4th, 8th, 10th, 12th, 13th, 19th, 21st, 25th, 27th and 28th.

A motion was passed June 2d, and from that day up to the 21st she had a daily evacuation.

June 27th. She applied at the hospital this day, as the bowels still require the stimulus of purgatives. She states that at the early part of her absence, strong carthartic doses have been requisite to open the bowels, but during the latter part much less powerful ones have sufficed. She has gained much in flesh, and her general health and appearance are greatly improved—pulse frequent but soft—tongue furred and white—catamenia scanty but regular.

Ordered Pil. aloës comp. gr. x. o. n. Magnesiæ sulph. ʒj. Inf. ros. co. ℥j. Ft. h. ter quotidie sumendus.

The patient attended throughout July, the bowels being at times much disposed to costiveness, which, however, exceeded not three or four days. There was a constant flushing of both cheeks after she had been in conversation a few minutes. The medicines above directed were continued through the month, about the middle of which some feverishness and pains of head were removed by a moderate blood-letting.

During August, her reports were more favourable than at any foregoing period. She got a natural pulpy stool every second day, of proper colour, and discharged without any of her old distressing uneasiness of abdomen. Her appetite was considered good; she had no thirst, and had increased in embonpoint. The medicines were necessary, though in smaller doses.

Sept. 8th. Has two healthy and easy motions in three days, and may be said to ail nothing, with the exception of slight recurrent pains of head and side. Small doses of purgative medicine are still continued, and she says she is confident they cannot be yet dispensed with.

LIST OF STOOLS.

No. 1. Dec. 10, 1827, after constipation of 5 weeks.—2. Jan. 27, 1828, ditto 7.—3. March 30, ditto 9.—4. June 8, ditto 10.—5. Sept. 17, ditto 14. *Five stools in 45 weeks.*

No. 6. Oct. 8, after constipation of 3 weeks.—7. Oct. 25, ditto 17 days. *Two motions in month of October.*

No. 8. Nov. 1, after constipation of 7 days. — 9. Nov. 7, ditto 6. — 10. Nov. 19, ditto 12.—11. Nov. 25, ditto 6. *Four stools in month of November.*

No. 12. Dec. 3, after constipation of 8 days.—13. Dec. 13, ditto 10.—14. Dec. 15, ditto 2.—15. Dec. 17, ditto 2.—16. Dec. 21, ditto 4.—17. Dec. 23, ditto 2 —18. Dec. 27, ditto 4.—19. Dec. 30, ditto 3. *Eight stools in December.*

No. 20. Jan. 6, 1829, after constipation of 7 days.—21. Jan. 8, ditto 2.—22. Jan. 13, ditto 5.—23. Jan. 15, ditto 2.—24. Jan. 22, ditto 7. *Five stools in 23 days.*

XVIII.

NAVAL HOSPITAL OF ST. PETERSBURGH.

REMOVAL OF A TUMOUR OF THE SPIRAL NERVE.*

This case is recorded by Harry Leeke Gibbs,

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* Ed. Surg. Journ. No. CI. Oct. 1829.

M.D., in our respected northern contemporary. The patient was a sailor, æt. 42, admitted on the 24th December, 1828, with a tumour the size of a small hen's egg, about four inches above the right elbow-joint, just beneath the insertion of the deltoid. It was tolerably moveable, but connected by a cord both above and below, very painful when handled, the pain being lancinating and following the course of the branches of the radial nerve. He stated that fifteen years previously he received a blow with a handspike on the outside of the arm, and that he suffered for several months from pain and numbness stretching to the back of the hand and fingers. In the course of six months he first perceived a moveable subcutaneous swelling the size of a kidney bean, painful to the touch, and accompanied with lancinating pain in the direction of the nerve, which was worse during changes of weather or violent exertion. For twelve years and a half it remained stationary and had not increased until two years before his admission when it did so gradually after long-continued hard labour. After proper antiphlogistic regimen, Dr. Gibbs proceeded to extirpate the disease on the 3d of January last.

"The arm being laid on a table, I made an incision of five inches, extending from the lower part of the deltoid to within an inch of the outer condyle of the *os brachii*. On dissecting back the integuments, a tumour of a bluish white colour was brought into view. I found it occupying the fossa, formed by the insertion of the *deltoid* muscle above, the *triceps extensor cubiti* behind, the origin of the *supinator radii longus* below, and the *brachialis externus* within. Under the outer portion of the latter muscle part of the tumour had imbedded and attached itself, so that it became necessary to remove it. Having separated the tumour from its lateral attachments, I divided the nerve three-quarters of an inch below it. The man instantly exclaimed that he had lost the power of raising his fingers, as well as the feeling in the outer part of the fore-arm and back of the hand. The dissection beneath was now easy, and I was happy to find that my fears of an adhesion to the periosteum were groundless. I lastly cut through the nerve at the like distance above the tumour, just as it emerges from beneath the bone. This was attended with pain, and as the artery accompanying the nerve bled freely, a ligature was applied. The vessel seemed dilated and to be the *arteria nutriens* of the tumour. The wound was brought together by strips of adhesive plaster, over which graduated compresses and a circular bandage were applied. The limb was placed on a pillow in a relaxed position, the fore-arm and hand enveloped in flannel, and a bottle of warm water ordered to be constantly applied to the fingers."

On the 4th there was so much constriction across the lower part of the sternum and præcordia, and pain shooting up the right side of the neck, that two pounds of blood were abstracted and an active purge administered. On the 5th a blister was applied, and on the 7th about half the wound was healed by the first intention, but there was acute pain at the extremity of the right thumb nail, and there was loss of sensibility in the parts supplied by the muscular spiral nerve. After a time electricity and stimulating frictions were employed, and on the 16th of April the patient was dismissed with returning sensation in the back of the hand, and a tolerably free use of the arm.

"The tumour on examination was found to consist externally of the thickened neurilema, extending from the nerve above the tumour as a capsule to the nerve below. This general tunic was of a lamellated structure, as viewed by the microscope, dense and inelastic, and of the colour of the *tunica albuginea* of the testis. Under this the nervous fasciculi appeared diverging and intersecting each other like net-work, to the thickness of half an inch. The rest of the mass consisted internally of a pulpy, striated, greenish-black matter, the striæ running from the circumference towards the centre, and surrounding minute interstitial cells filled with a similar medullary pulp or jelly. A small portion of coagulated blood was very distinct on one side in the firmer substance of

the tumour. The centre was occupied by half a tea-spoonful of highly fetid coffee-coloured sanies. Condensed cellular membrane surrounded the whole of the tumour, which at the inner and lower side was firmly adherent to that part of the *brachialis externus* removed with it during the operation. The tumour was an oval of two inches and a half in the long diameter, by nearly two inches across. This, with the portions of nerve divided above and below, brought the whole length of the extirpated part to four inches.

"*Observations.*—That the blow received on the arm fifteen years ago was the primary cause of the chronic inflammation established in the radial nerve, most probably first in its neurilematic theca or capsule, there is little doubt; but that it should have once commenced and then have lain dormant for the space of nearly thirteen years, is remarkable. This reproductive power I have had occasion to observe not unfrequently both in the mammæ and testes, arising either from a blow, the action of cold, or some peculiarity of the system at the time. The epididymis I have found to be the most speedily affected by this sudden change, particularly in dram-drinkers, and in those addicted to excess in venery. In these cases it appears to me that the sooner an operation is had recourse to, the better. The preparation of this rare and interesting tumour I have presented to the Hunterian Museum belonging to the Royal College of Surgeons of London."

The above is a very good example of those tumours connected with a nerve or its neurilema, which have been described by authors, and are occasionally met with in practice. We do not altogether share in Dr. Gibbs' surprise respecting the cessation of troublesome symptoms for the long interval of twelve years, as such temporary pauses are far from uncommon in the march of many organic diseases. Who, for instance, has not seen scirrhus occasonally lie dormant for a very considerable period of time, only to be kindled up at last into furious malignancy, and rapid disorganization?

XIX.

ST. GEORGE'S HOSPITAL.

HYSTERIA.

There is not a more important practical lesson for a medical man to learn, than the power of distinguishing hysteria in its thousand forms from the various organic diseases which it apes. Unfortunately this is a power or a tact of which the generality of practitioners would seem to be destitute, for scarcely an admission day passes over our heads at this hospital without affording melancholy proofs of the evil consequences arising from mistakes of this nature. Young women are constantly applying with hysterical and nervous pains, whose complaints have been rivetted and constitutions shaken by injudicious and injurious depletion. We believe that the profession are beginning to discover that calomel and the lancet have been dealt around with a rather too liberal hand, and the various works on neuralgic diseases at present thronging from the press, give promise of a more rational appreciation of the affections of the nervous system. The following cases may not be devoid of utility in pointing out the frequency of hysterical pains in young women and the kind of treatment best adapted for their relief or removal. At the same time we must say that hysteria is too often an intractable complaint even under the most judicious system of management, and the supervention of mania, epilepsy, or even palsy shew, but too plainly, the tendency of diseases of this class to run into one another.

CASE 1. *Cough—Pain in the Side—Fluttering at the Heart—Menorrhagia.*

Mary Pearce, æt. 21, a servant, unmarried, admitted July 24th, 1829, under the care of Dr. Chambers.

Dry cough excited on taking a full inspiration which also gives her pain in the left

hypochondrium—fluttering at the heart—able to lie on either side—pulse quick but quite soft—skin moist—urine free and pale—no globus—nervousness approaching to hysteric passion—mænorrhagia every three weeks.

Has had pain on going up stairs, &c. for a month, but the present illness is only of a week's duration. It came on with cough, pain in the head and back, and shivering soon after her "period;" she knows no cause for her complaint.

Empl. canth. lat. sinist. Mist. camph. ℥iss. *Tr. hyosciam.* ℥ss. *ter. die. Diæta lactea.*

On the 24th being rather heated she was ordered house-physick and salines with antimony, and on the 27th, Ext. col. c. Ext. hyos. āā gr. v. every night. On the 31st the cough was almost entirely gone, the other symptoms had disappeared, and in a few days afterwards she was discharged cured.

CASE 2. *Chlorosis—pain in the Chest and Head.*

Cath. Carey, æt. 16, admitted May 21st under the care of Dr. Seymour.

Pains about the sternum increased on walking or standing, but not on making a deep inspiration—slight cough not worse at one time than another and unaccompanied with expectoration—pains over the head aggravated on rising in the mornings—occasional dimness of vision—no appetite for animal food which she says makes her sick—pulse languid—tongue moist and whitish—bowels rather confined—appearance extremely delicate and chlorotic—has never menstruated.

Ill between two and three months, having in the first instance caught a bad cold accompanied with what seems to have been globus hystericus—applied at a dispensary where she was cured of the cold, &c. but became affected with the pains in the head and chest. Has attended at the dispensary with little relief to the present time. She says that when her cough was bad she occasionally spat blood.

Tinct. ferr. amm. ℥ss. *Infus. cascar.* 3x. *Tinct. cascar.* 3j. *M. ter die. Pil. Al. c. Myrrh.* ℈ss. *altern. noct. Diæta media.*

On the 22d she was ordered the shower-bath every morning and a Burgundy pitch plaster was applied to the chest. On the 26th, the pain in the head was nearly gone and that in the chest much relieved, she was fatter, and had little cough. On the 4th of June she complained of more pain in the head but had none in the chest; she thought the bath agreed with her. On the 3d of July she was sufficiently well to leave the house. At this time she was infinitely better than she had been on her admission, but could scarcely be said to be cured, as the chlorotic state still continued. The cough was gone, the pains were very nearly so.

CASE III. *Pains in Head, Chest, &c.—Palpitations—Scanty Menstruation.*

Sarah Byatt, æt. 22, admitted June 10th, 1829, under the care of Dr. Seymour.

Pains in the head, right and sometimes left side of chest down to the ossa ilii, aggravated on inspiration or by pressure, but out of all proportion to the force employed—palpitations—flatulence—borborygmi—heart-burn—bowels confined without medicine—catamenia scanty—appearance hysterical. Has been ill ten months, bled, leeched, and purged with the effect of aggravating her complaint. Blisters afforded her some relief.

℞. *Tinct. valer. amm.* 3j.—*Mist. camph* 3x. *M. ter. die. Baln. imbrif. o. m.*

She continued much the same till the 19th, when she still complained of pain in the right side and shoulder, and the tongue was rather white. The medicine was altered to,—

Tr. castor. 3ss.—*Aq. cinn., Aq. font.* āā 3v. *M. bis die.*

On the 22d her catamenia being on her, the medicines were omitted, but on the 25th they were resumed. On the 28th there was pain in the right side of the chest, shoulder and hypochondrium, and the pulse was quick and feeble. The mist. ferr. c. was ordered bis die. On the 30th, in consequence of the sluggish state of bowels, senna draught was directed to be taken twice a week, and on

the 17th of July, in consequence of the severity of the pain about the right hypochondriac and iliac regions, a blister was applied. On addressing her there was nervousness observed almost approaching to chorea. On the 21st, the catamenia again appeared, and the medicines were ommitted. On the 24th she looked very well, but still complained of the pain in the right *iliac* region increased on inspiration, &c. and evidently disliked resuming the use of the shower-bath. In the course of a few days she was dismissed having little of consequence the matter with her.

CASE IV. *Pain of Chest—Severe Cough—Scanty Menstruation.*

Maria Anson, æt. 18, a florid country girl, admitted Sept. 10th, 1829, under the care of Dr. Chambers.

Pain just under the xiphoid cartilage, appearing night and morning, and aggravated on full inspiration—no pain elsewhere—head-ache *when* the pain in the chest is present—severe cough at night with little expectoration—shortness of breath—borborygmi—no globus—pulse rather sharp and between 70 and 80—face flushed and hysteric looking—skin warm and moist—tongue clean—bowels open—urine free—catamenia at present on her, but scantily.

Ill two years with the present symptoms sometimes better and sometimes worse. Three months ago had pain in the "right side," (region of colon) for which she was bled, &c. with little benefit. Catamenia appeared at the age of 14, and have continued with regularity till the last three months, during which time they have not made their appearance till at present. Has been leeched, bled, blistered, &c. without relief; father died of a decline.

V. S, ad ℥xij.—*Inf. ros.* ℥iss.—*Mag. sulph.* 3ij.—*Spir. æth. sulph. c.* 3ss. *ter. die. Diæta lactea.*

On the 11th the cough being very troublesome at night, she was ordered an opiate at bed-time, and on the 16th a blister was applied to the chest. On the 18th the former medicines were discontinued and pil. galb. c. 3ss. given thrice daily. On the 25th she was ordered a shower-bath every morning. On the 3d of October, after exposure to cold, she was attacked with slight inflammation of the lungs, which was immediately treated and relieved by a small bleeding, salines with antimony and hyoscyamus, and a brisk cathartic of calomel, ipecacuanha, and jalap. On the 10th she complained of pain over the right eye at night (the clavus hystericus) pulse soft and frequent, skin cool and moist, tongue rather red, bowels open, urine free. Camphor mixture with the spiritus ammoniæ fœtidus was prescribed, and on the 12th the patient was discharged cured.

In all these cases, except that of Byatt, the prominent symptoms were pain in the chest and cough, the latter being extremely severe in the last case, that of Anson. All the patients presented unequivocal marks of the hysteric diathesis, if we may make use of such a term, viz. derangement of the catamenial secretion, flatulence, costiveness, borborygmi, globus, or clavus hystericus. In the second case, that of Carey, the general appearance and thoracic symptoms might have led many persons to imagine that phthisis was present, and probably had she been blistered and leeched and bled they would have contributed to the correctness of their own diagnosis, and "made the food they fed on." In the last case, that of Anson, the pain in the chest, the shortness of breath and the cough, together with the circumstances of her father having died of a decline according to her own report, might likewise have induced many to treat her for inflammation in the lungs, as indeed she had been treated without benefit, prior to her admission. The general appearance, however, the clavus hystericus, and the flatulence sufficiently pointed out the hysterical character of the case, and it subsequently turned out that two or three months previously her sweet-heart had given her a gonorrhœa, for which she indignantly cast him off, and from which period her more aggravated symptoms commenced. At the same time it must be allowed that this was in some degree a mixed case, the catarrhal affection being more than usually severe, and justifying, if not

strictly requiring, moderate antiphlogistic measures. These cases are the ones that demand most skill on the part of the medical man, and consequently are those which are most frequently mistreated.

For our own parts, we believe that there are very few cases of this kind that require general depletion, very many indeed that are aggravated and rendered almost incurable by its adoption. If depletion is necessary it should be local by means of leeches and cupping, but counter-irritation by blisters, or the tartar-emetic is to be preferred. In almost every instance the patient experiences relief from blisters, but there is this disadvantage attending their use, that it directs the patient's attention to the *part*, whereas it should be the object of the practitioner to draw it off and divert it. In a future report we will detail some more aggravated cases of hysteria, and also some where the heart was the principal organ affected.

XX.

EDINBURGH SURGICAL HOSPITAL.

QUARTERLY REPORT. By JAS. SYME, Esq.*

We need not say how long and how earnestly we have entreated the medical attendants of provincial hospitals to publish reports of the valuable cases that constantly fall to their charge. Scarcely a Number of this Journal has seen the light for these last four or five years without an exhortation to the gentlemen in question to rouse them from their lethargy, and convince their brethren that they are not altogether like the sleeper Nourjahad. We regret to say that the appeal is not yet answered, as it should be answered from John o' Groat's to the Lizard's Point, with universal activity and zeal. Too many of our country surgeons and physicians still spread the oblivious veil of silence on their practice, and crawl from the cradle to the grave with the proud satisfaction of having done *nothing* for that science, which perhaps did all for them. Is there no mode of stinging into sensibility the callous feelings of these blameably unambitious men, no argument ad hominem that will prick their *ursine* sloth, no spirit-stirring impulse that will quicken into life the dormant generous emulation implanted by kind Nature in the bosom of the dullest? Alas we know of none, except the gradual but steady operation of public opinion, conveyed through the medium of the PRESS. We are happy to be able to exempt not a few provincial surgeons from what may seem the sweeping censure which we have uttered. The medical officers of the infirmary at Glasgow, Dr. Ballingall of Edinburgh, and the many respectable and able contributors to the Midland Journal and Provincial Gazette are honourable exceptions, to whom are due, and to whom we have seized every fit opportunity of awarding the unbought praises of independent men. The last who has commenced this goodly race is Mr. Syme, and that under circumstances of rather peculiar character.

It seems, for reasons which he does not state and which perhaps it would be impertinent in others to enquire, that in the early part of this year Mr. S. was induced to hazard the establishment of a surgical hospital in Edinburgh. Minto House was leased, pupils enlisted, patients applied, and better than all *contributors* stepped forward, the end of all which necessary preliminaries was—a hospital of twenty-four beds, "with all appurtenances and means to boot," and a quarterly report in due time from Mr. Syme of all the hair-breadth 'scapes and perils of its inmates. From this report we shall select what is most interesting and begin with:—

I. EXCISION OF THE ELBOW-JOINT.

"This operation was performed twice, viz. on Janet Burns, aged 25, from Carnwath, and on John Wells, aged 9. The mode of procedure was the same as that detailed in the account lately published in this Journal of three cases where the operation was performed.

* Edinb. Journ. of Med. Science, No. CI. Oct.

"There was nothing in the previous history of these cases worthy of mention. They both laboured under well-marked caries of the elbow-joint, and would both, a short time ago, have been condemned to amputation without any ceremony. Janet Burns was harrassed by a slight degree of chronic bronchitis, which delayed her recovery, and rendered the complete and permanent establishment of her health somewhat doubtful. She left the Hospital considerably better in this respect than when she entered it, and with the prospect of retaining a useful arm.

"The boy was a most favourable subject for the operation. His disease resulted from external injury, a fall on the elbow, his constitution was good, and he possessed a most excellent disposition, which induced him to perform accurately whatever he was desired in regard to the position and exercise of the limb. Five weeks have now elapsed since the operation, and he is beginning to regain command of the joint, which is nearly as moveable as ever. I expect a most complete recovery in this case, which will be the more remarkable, as a very large portion of the ulna was removed. After sawing off the extremity of the humerus, and cutting away with the pliers the olecranon and head of the radius, I thought from the sound appearance of the different surfaces that enough had been done, and dressed the wound. But it fortunately happened that when the excised portions were afterwards more carefully examined, one of the gentlemen present, Dr. Vallange, observed, that the cut surface of the olecranon presented a small carious cavity, a portion of which must consequently have been allowed to remain. I immediately undid the dressings, and by replacing the olecranon discovered the carious part, which was a sort of cylindrical excavation no wider than a common quill, but running deeply into the bone. Having ascertained its extent by introducing a probe, I insulated the ulna as far as was necessary, and cut it across through the shaft, so as to detach the whole spongy portion of the bone, which was then removed, though not without some difficulty, owing to the connexion of the brachiæus internus.

"In this case the only muscle left undisturbed was the biceps; and the difficulty of moving the joint ought to have been if possible still greater than some people allege it to be, when merely the triceps is detached from its insertion. It has surprised me considerably to find that my pupils felt it difficult to conceive how the efficiency of the muscles could be restored in these circumstances, since there are so many parallel cases of every day's occurrence, for instance, the use of a stump, which is so soon regained, owing to the muscles fixing themselves round the bone.

"The difficulty of conceiving this very easy matter was, however, so great, that I requested Mr. Y——, whose case is detailed in my former paper on this subject, to allow the gentlemen attending my clinical lectures to satisfy themselves by occular and manual examination of the very perfect command which he was able to exercise over his arm. This gentleman is preparing to finish his education as a clergyman, and finds himself able not only to write sermons, but to execute all the ordinary motions of the arm."

II. EMPLOYMENT OF THE ACTUAL CAUTERY.

Every body knows, or ought to know, that there is a periodical mania in surgery and medicine for the re-introduction of ancient practice and obsolete opinions. The rabies of the anti-contagionists comes regularly round after a term of years, and so it is with many other things, especially with the employment of the actual cautery. Heaven knows this measure had a pretty fair trial, and was not abandoned until after its merits had been tested by a long and dreadful experience. Gentlemen, however, now-a-days would wish to persuade us that a red-hot iron is a pleasant thing enough, and by no means attended with those disagreeable sensations with which its application is invested in the eyes of vulgar prejudice. Mr. Syme has for some time past made much use of the cautery as a counter-irri-

tant in that scape-goat for fifty diseases, "the morbus coxarius," and "the *similar* affection of the shoulder-joint, the *omalgia* of Rust" It is much to be lamented that gentlemen will still make use of unmeaning terms like the above, terms which embrace so many and such various maladies of the parts in question, that the published results of any mode of treatment employed for them is not worth one farthing!

III. EXCISION OF THE MAMMA.

"Mary Messer, æt. 38, from Torwoodlee, had been afflicted for nearly three years with all the symptoms so well described by Sir A. Cooper under the title of irritable tubercle of the breast. About two years ago she consulted me on account of these complaints, when I recommended the use of means proper for restoring the uterine secretions, which had long been very irregular, and for three months previous to that time altogether suppressed. She complied with these directions, and in the course of a week had a return of the interrupted discharges. Her complaints were then much alleviated, and continued to be so for several months, when, though the uterine actions continued regular, the symptoms of her complaint became considerably aggravated, and at length the almost incessant, occasionally most unsufferable, pain of her breast shooting into the arm, shoulder, and side, tormented her so grievously both night and day, that she resolved on having the disease removed by the knife. With this view she was sent to the Surgical Hospital by my friend Dr. Anderson of Selkirk.

"Conceiving it right to comply with the patient's urgent desire to have the breast excised, since all other means of relief had failed, and success had attended the extirpation of the testicle when similarly affected, I performed the operation on the 13th May. The wound healed by the first intention, and she left the hospital on the 23d, quite free from her former sufferings, and in a state of mind very different from the extreme dejection and anxiety which characterised it previous to the operation. According to the latest accounts from Dr. Anderson she continues perfectly well. The breast on dissection exhibited the appearances described by Sir A. Cooper, being merely more dense and uniform in structure than usual.

Janet Anderson, æt. 40, entered the Hospital on the 8th May, on account of a scirrhous mamma, which had recently suppurated to a small extent on the surface; it was removed a few days afterwards, the wound healed by the first intention, and she would have been dismissed as quickly as the last mentioned patient, but an abscess formed in the axilla, which excited our worst suspicions, and induced us to detain her for some time longer. Fortunately this abscess did not turn out to be malignant, but healed most satisfactorily, and the patient was dismissed quite well on the 18th June. She returned a few days ago to show that she continued free from complaint, and offer thanks for the care which had been bestowed upon her, previously to her departure for the north.

"Margaret Mathieson, aged 23, was recommended to the hospital on the 10th of June by Dr. Johnston of Kirkaldy, on account of a very large and exceedingly hard tumour in the axilla. It filled the axillary cavity so completely as to prevent the arm from being approximated to the side, and was occasionally the seat of severe lancinating pain. It had existed more than half a year, and was continuing to increase progressively. Notwithstanding the youth of the patient, the symptoms just mentioned would probably have induced me to remove the tumour, had other circumstances been favourable to this proceeding, but it was rendered quite impracticable by the firm connexions of the tumour, and even if this objection could have been overcome, the existence of many hard tumours of a smaller size in the neck and throat would have rendered an operation quite unjustifiable.

"It occurred to me, that, as the uterine discharges were suspended, advantage might result from the internal administration of cantharides, especially as this medicine has a very remarkable effect in promoting the action of the absorbent vessels in general. In no long time after commencing the course

prescribed to her, she noticed a remarkable diminution not only of the pain, but also of the swelling, and regularly improved until the 10th of July, when, being comparatively speaking well, she returned home in great joy at her recovery.

We would remark that of many cases of irritable or hysterical breast which we have witnessed not one *demanded* amputation. It is a remedy which we should resort to with the utmost possible reluctance, for even if not succeeded by dangerous symptoms, the irritability or pain may re-appear in the cicatrix, the other breast, or perhaps in a distant part, to the bitter disappointment of the patient, and regret, perhaps disgrace of the surgeon. We hold an operation in such cases to be bad practice, except in very particular circumstances.

IV. HYDROCELE.

"There were only two cases of hydrocele, but both rather interesting. The first was that of William Mackintosh, æt. 28, a north country cattle drover, who entered the Hospital on the 17th May, labouring under the following complication of diseases:—Sores on the penis, bubo, ague caught on passing through some of the fenny districts in England, and a hydrocele of nine years standing. Having subdued his other disorders, I punctured the hydrocele, and evacuated a large quantity of chocolate-coloured fluid, holding in suspension many of those small shining scales which my friend Dr. Christison has found to be Cholesterine. As there was much enlargement of the testicle, and great thickening of the sac, we did not think it right to inject, and proposed to the patient to perform either the old oporation of excising the sac, that is to say, a portion of it, or the more simple process of castration. He preferred the latter; but before submitting to it, found it necessary to return to the north to execute some business of importance. It is this sort of hydrocele which has been named hæmatocele, and probably with some reason. In the case just related it was observed, that when the dark brown fluid was allowed to stand quietly in the glass, a quantity of pure blood collected in the bottom, and in another case formerly under my care, the hemorrhagic nature of the disease was still more manifest. I punctured a large hydrocele, and drew off a quantity of the same sort of fluid as above described; but finding that by far the greater part of the swelling still remained, and that the patient, who for several years has been frequently prevented by fits of pain from following his avocation for weeks together, was now suffering more than ever, I proposed removal of the testicle, and performed the operation with perfect success. On examining the tumour, I was not a little surprised to find the testicle quite sound, and that what had led me to think it enlarged was a great mass of dense fibrinous matter, which adhered no less firmly to the tunica vaginalis than the coagulum of an old aneurism does to its inner surface.

"The other case of hydrocele treated in the Hospital was that of Alexander Wood, aged 24,—a well marked case of hydrocele of the cord. I drew off the contents which were perfectly pale and limpid, but did not inject, since it seems that dropsy in this situation is not so apt to return after evacuation as when it is seated in the tunica vaginalis.

"The patient accordingly had a very slight return of the swelling, which soon subsided, and he has been dismissed cured."

Our want of space compels us to stop, but we recommend Mr. Syme to prosecute the system of reporting the interesting cases that occur to him. By doing so candidly and conscientiously he will confer a boon on the profession, he will earn a laurel, or possibly a more substantial reward, for himself. Were we allowed, in conclusion, to hint a fault in the present report, it were that of *curing* the patients too rapidly. When Mr. Syme is somewhat older as a hospital surgeon he will learn the fallacies of hospital practice, and find that "dismissed cured," is oftentimes a rather deceptive record. We part from Mr. S. with much respect.

XXI.

THE RIVAL NOTE TAKERS.

Intereunt omnes.

Mr. Lawrence has revoked his permission to some six or eight journals to publish his lectures every Saturday morning. Poor gentleman! We dare say he must have felt some such qualms as David is said to do at Sternold and Hopkins' translation of his Psalms, when he witnessed his unfortunate sentences twisting and writhing into all their fantastic forms under the combined exertions of short-hand writer and printer's devil. Poor gentleman! He might have said to the public, like the frog in Æsop, this is sport to you but death to me! The hebdomadals made holiday indeed, fattening and glutting on the Lecturer with a lively presentiment no doubt of the short lived nature of their gorge. Mr. Lawrence was served up regularly in yellow and in green, and in, Heaven knows how many colours besides, till at length he became like a sloughing fungus surrounded by a halo of "inflammation." And then the quarrels of the respective cooks; why you would have thought they were so many dogs over a bone,

> Gorging and growling o'er carcass and limb,
> They were too busy to look at him.

In one of those Christmas pantomimes with which when youngsters we used to be delighted, and which (shall we own the "soft impeachment?") still occasionally tickle our more sober fancies, in one of those pleasant amusements we say, a too attractive beau is placed amongst a party of ladies of somewhat strong passions and easy virtue. Each in her eagerness to monopolize the dear object seizes hold of an arm, a finger, or a toe, a violent struggle amongst the fair candidates ensues, and at length the gentleman is pulled, like poor Orpheus in Thrace, into a thousand pieces. Such a method of shewing one's affection though agreeable no doubt to the looker on, is naturally rather unpleasant to the party particularly interested. Now M. L. was placed in much the same situation as the beau in the pantomime. Each of the journals which blazoned his fame and reported his lectures was naturally jealous lest its rival should receive an ogle, a squeeze, or an amorous sigh from the common object of either's devotion. One of them, whether unusually fond or unguardedly bold, ventured on the common *ruse* of love, and protested or rather whispered that it had been made happy by favours secret, sweet, and precious. A billet-doux was hinted to have been received from Whitehall Place; and Fame, that tattling jade, was stalking as a burly Churchwarden of St. Giles's, now skulking in the sooty form of that "devil which printers own," spread the loving lie in our modern Babylon. The opposite party at the *bruit* of this horrid rumour sank at first into a sort of stupor, accompanied with such low muttering delirium, that many of the friends began to entertain very serious apprehensions of fatal oppression on the brain. These apprehensions fortunately proved to be unfounded, for after a *green* and yellow melancholy which lasted about a week, jealousy and distraction again took possession of the mind, and the never-to-be-sufficiently appeased individual hurried to the fountain head to ascertain whether or not the hateful report was true. To the unutterable joy of the applicant it was found to be totally false, but the objurgations, the tearing of hair, the shocking names, and hard blows that ensued between the rivals it was really dreadful to hear or see. The lecturer appeared to be sadly bothered with his doxies, and sighed, for sing he could not, the well-known Macheathian stanza on a similar occasion, with wonderful pathos and effect.

One of the parties in particular, arrayed in a loose jalap-coloured wrapper, which the poor soul was always observed to be particularly fond of decorating with figures of hats and bonnets and babies caps, she, we regret to say, became so outrageous that even her best friends put their hands to their ears. A singular hallucination appeared to be present to the demented creature's sensorium. She thought she was con-

templating an old ivy mantled tower, with various birds of night, and particularly bats, flitting in the gloom and nestling in the ruins. With her eye "in a fine phrenzy rolling" she invoked all these repulsive animals with great ardour and excitement, screaming out in a remarkably harsh and vulgar tone, bats—vampires—blood-suckers —corruptionists — toads — butchery—murder—havoc—tyranny—non-medical coroners — select vestries — Lincoln's Inn — St. Giles's — infamy—curses—damn—n——and the like, till the blood of the bystanders positively curdled in their veins. Many attempts were made to pacify or shame her but all to no purpose, for the monomaniacal orgasm was above control. It was singular that when at the very height of her fury, she immagined herself a great blessing sent down from above to purify and cleanse the old building in question, although it was quite evident to those who approached her at all closely, that the peculiarly disagreeable maniacal odour was very strong upon her. Her habits of cleanliness too were so completely forgotten, that her stench was like the rod of Aaron, and completely overpowered and absorbed the effluvia of the whole of the other animals.

With regard to the lecturer, she was observed to entertain some very curious ideas respecting him. At one time she considered him a demigod, and stroked his beard with such fondness and regard that it actually drew tears of sensibility from the eyes of those who witnessed her. But he having found it expedient to go into a chamber of the building, where several elderly looking persons were seated at a table questioning some very sheepish looking young men, and having with difficulty got a chair amongst them, the affections of the poor soul were evidently weaned from him. She took it much to heart, and appeared to upbraid him privately, but was deterred from accusing him publicly of infidelity partly from the dread of many friends who surrounded him, and still more from her anxiety to extract something from his pocket. What this was could never be exactly ascertained, one set of persons declaring that it was a note to prevent an execution, others that it was a large bundle of papers, tied with red tape, and appearing to be his lectures. Whatever it was, the refusal to surrender it threw her into such an accession of the most furious of furies that well founded fears were entertained of her putting a violent end to herself, her rival, the neighbours, or even the once dear lecturer. Fortunately, a this crisis a strong party of the New Police happened to come by on their way to the St. Giles's district, and they judged it expedient on all accounts to lodge her in that watch-house for the night. We regret to say that we have had no means of ascertaining the subsequent fate of the unfortunate creature.

XXII.

ON A PECULIAR HÆMORRHAGE FROM THE UTERUS. By DR. R. GOOCH.

In Dr. Gooch's late work, there is a short chapter of a few pages on the above subject, of which the present article is a concise analysis.

When we find the uterus contracted after delivery, we do not dread hæmorrhage—nor have we, generally speaking, any cause to dread it. Yet we are often struck with the little proportion existing between the want of contraction and the degree of hæmorrhage, the uterus being sometimes found bulky without discharge of blood,—and great hæmorrhage sometimes obtaining without much size of the uterus.

"Nay, further, I have witnessed a profuse hæmorrhage though the uterus had contracted in the degree which commonly indicates security; and I have ventured to do what is seldom justifiable, separate the placenta before the uterus had contracted, without more hæmorrhage than after a common labour. What is this circumstance which has so great an influence that its presence can cause a moderately contracted uterus to bleed profusely, and its absence can cause an uncontracted uterus to bleed scarcely at all?"

That the contraction of the uterus, after delivery, may occasion a sufficient closure of the blood-vessels to resist the ordinary force of the circulation, is very probable; but it is reasonable to suppose that, if the force of the circulation be extraordinarily great, the closure of the vascular orifices might be overcome, and hæmorrhage succeed. The following case is adduced to prove this.

"April 10, 1815, I delivered Mrs. S. W. of her second child; for many hours before the accession of labour she was flushed, and had a very full quick pulse. Abstinence from meat, wine, and warm drinks, a cool room, and a saline purgative, diminished, but did not remove, this state of the circulation, which continued in a considerable degree when the child was born: it was expelled very gradually, and, after the removal of the placenta, the uterus felt in the hypogastrium contracted in the ordinary degree; nevertheless, about twenty minutes afterwards there came on one of the most frightful hæorrhages I ever witnessed; by the introduction of the hand, and the application of cold, however, it was speedily arrested.

"It was somewhat more than a year afterwards when she informed me that she was pregnant again, and coming to town to lie in. As she arrived only two or three days before she fell in labour, I did not see her till she was taken ill; but then as soon as I entered her chamber, I was struck on observing the same state of circulation that had preceded her former labour; she was sitting in her easy chair, with a red face, and a throbbing pulse. I had not been many minutes in the room before the pains became so strong it was necessary to put her on the bed, and soon afterwards the child was born; it could not be expelled more gradually; after the head was born another pain expelled the shoulders, another the body, and another the limbs. I cut the chord, placed my hand on the abdomen, and felt the uterus contracting in the usual degree, yet a few minutes afterwards the blood burst out with prodigious impetuosity. The fearful scene which followed, I need not depict; it is enough to state, that by the introduction of the hand and the application of cold, the hæmorrhage was speedily suppressed, yet it bleached her face, and for many days she could not sit up without faintness."

The inference which our author drew from these two labours was, that in this case the hæmorrhage did not depend on want of contraction of the uterus, but want of tranquility of the circulation. He determined therefore that, in case of another pregnancy, his endeavour would be to let labour come on with a cool skin and a quiet pulse. It was not long before he had an opportunity of trying the experiment. Four months previous to her next confinement she called on our author to inform him of the event, and he advised her to take meat only thrice a week—a purgative of salts and senna thrice a week—"*a scruple of nitre three times a day:* this she began two months before she expected to be confined, and continued it up to the full time."* Four days before delivery, Dr. G. had the satisfaction to find the lady with a soft pulse and cool skin. But, unfortunately before labour commenced, the scene changed—the old heated skin and hurried circulation though somewhat mitigated, returned, and, under these circumstances, delivery took place. The surgeon put his hand on the abdomen, and said he seldom found the uterus more contracted so soon after delivery. Yet within a few minutes there came on a flooding—not so great as on former occasions, but enough to induce syncope, and detain the medical attendants in the house for several hours. In process of time this lady became pregnant again, and pursued the same plan, with the addition of a moderate venesection a fortnight before the expected accouchement, and

* Is Dr. Gooch aware that this is an enormous dose of the nitrate of potash, continued for such a length of time? A drachm of nitre daily for two months!! We have seen much injury done to the stomach by five grain doses three times a day.—ED.

another three or four days before that event. She fell in labour, and Dr. G. was pleased to find the pulse soft and slow. No flooding or faintness succeeded the delivery.

"How often a disturbance of circulation plays an important part in uterine hæmorrhage it is difficult for an individual to know; but I suspect sufficiently often to deserve the special attention of practitioners. I advise them when they meet with patients subject to hæmorrhage after delivery, to notice the state of circulation before labour, and if disturbed, to employ means for tranquilizing it before labour comes on. I advise them during labour, to use cordials cautiously, lest the placenta should separate during an excited state of circulation. I advise them after delivery, though the uterus may feel contracted, to be slow to leave their patient, if the circulation is greatly disturbed."

In hæmorrhages from the uterus, alternations of contraction and relaxation of the organ, with corresponding recurrences of bleeding, are familiar to observing practitioners. In the case of the lady above-mentioned, although the abdomen was covered with pounded ice, the hæmorrhage returned again and again, with corresponding changes from contraction to relaxation of the uterus. Finding the ice so inefficient, Dr. G. swept it off the abdomen, and poured a basin of cold water from some height upon the belly. The effect was instantaneous. The uterus contracted like a ball, and the bleeding ceased. In the second labour he took several handkerchiefs, soaked them in vinegar, and passed them, one after the other into the vagina, so as to completely fill it. This effectually prevented all external hæmorrage. The faintness ceased, and the uterus began to harden. But these favourable symptoms did not last long. The pains ceased, the uterus grew soft and seemed to swell—the pulse became thready, and the lady grew ghastly pale. It was evident that the blood was flowing into the uterus, and that an external hæmorrhage was only converted into an internal one.

"My belief now is, that when hæmorrhage occurs after the removal of the placenta, the quickest way to stop it, is to introduce the left hand closed within the uterus, apply the right hand open to the outside of the abdomen, and then between the two to compress the part where the placenta was attached, and from which chiefly the blood is flowing. When the hand is introduced merely as a stimulant, there is an interval of time between its arrival within the uterus and the secure contraction of this organ, during which much blood is often lost. By directing the hand to the very vessels from which it issues, and compressing them as I have described, this quantity is saved. If I may judge by my feeling, the blood stops, in a great degree, even before the uterus contracts: the hand acts first as a tourniquet, then as a stimulant. It is true we cannot tell with certainty where the placenta was attached, and consequently where the pressure should be applied; but as it is generally attached to or near the fundus, if the pressure be directed there, it will generally be right."

But to return to the patient, whom we left nearly in articulo mortis. Dr. G. drew out the handkerchiefs and applied his hands in the manner above described, with the most immediate and happy effect. The bleeding stopped—the patient revived—and the uterus contracted. She looked blanched and pale for several days afterwards.

XXIII.

ACUTE PURULENT OPHTHALMIA FOLLOWING THE SUPPRESSION OF AN HABITUAL LEUCORRHŒA.*

We have often been surprised at the reckless manner in which medical men endeavour to check habitual discharges from the vagina, by means of astringent or stimulating injections. Fortunately in most cases Nature knows what is advantageous for the patient better than the doctor, and the mischievous medication fails in accomplishing the injurious end at which its author is blindly aiming. The following case is an instructive one.

* Nouv. Biblioth. Mars, 1829.

Case.—Madame H——, ætatis 27, of delicate and nervous constitution, and subject to mænorrhagia, had suffered for some time from leucorrhœa unattended with any irritation in the vagina or neighbouring parts. She was married, had one child four years old, and had recently experienced a miscarriage. The system being much debilitated and the leucorrhœa troublesome, Dr Gibert, her medical attendant, ordered injections and lotions of cold water with a fourth part of vinegar of roses. The patient who was anxious to be rid of her unpleasant malady, exceeded the prescribed quantity of vinegar in the injection, and the consequence was an almost instantaneous suppression of the leucorrhœal flux. At the same time the eyes became red and painful, lacrymation was abundant, and a copious discharge took place during the night which glued together the eye-lids and stained the linen. On the 21st of June, 1828, seven or eight days after the first appearance of the ophthalmia, the conjunctiva was deeply injected, the eyelids of bright red, swelled and affected with painful smarting. Dr. Gibert now began to be alarmed, and ordered mustard poultices to the thighs, and the steam of warm water to the vulva in order to restore, if possible, the discharge; a blister to the arm, twelve leeches to the jaws, cold applications to the eyes, darkness, and the antiphlogistic regimen. It must be confessed that the Doctor shewed strict impartiality in the choice of situations for his remedies, attacking at one and the same time the eyes, the jaws, the arm, the parts of generation, and the thighs! But no matter—allons; on the two following days the pain and smarting of the eyes were exasperated, the left eye particularly was extremely red, the purulent discharge was copious, the eyelids greatly swollen. In addition to the former means pills of *cynoglosse* were given, and two porringersful of blood abstracted from the arm. On the 24th the inflammation was in some degree lessened in the left eye, but the pain and inconvenience were increased in the right. Two porringersful of blood were again taken away with the best effect, and on the 29th the catamenia re-appeared, but continued only three days instead of eight as they had ordinarily done. The mitigation of the inflammatory symptoms in the eye "progressed," as our Transatlantic confrères would say, but so late as the thirty-second day after their first appearance the sensibility of the organ was still extreme, and the discharge very abundant and of purulent character. Narcotic and astringent collyria had been employed, but the Doctor now determined to ascertain whether that which had raised the d—l might not lay him; in fact, whether the injection which when used for the vagina had driven the disease to the eye, might not now if applied to the eye drive it back again. Accordingly a collyrium of water and vinegar of roses was employed, the discharge very quickly arrested, and the lady soon able to return to her occupations, though coloured glasses were worn for the sake of precaution. Several months afterwards Dr. Gibert had an opportunity of seeing the patient again and found that her vision was still weaker than it had been before the attack, and that the leucorrhœa had slightly returned. The case is one of much practical interest, and is calculated to inspire caution where caution is much wanted.

XXIV.

ON A PECULIAR DELIRIUM, UNACCOMPANIED AFTER DEATH WITH THE USUAL APPEARANCES OF INFLAMMATION OF THE BRAIN.

In the first addition of his work Dr. Abercrombie described a peculiar affection of the brain under the head of, "*A dangerous Modification of Meningitis which shows only increased vascularity.*" The following is the graphic description of the disease originally furnished by our author.

"Another important modification of the disease occurs in an insidious and highly dangerous affection, which I think has been little attended to by writers on the diseases of the brain. It is apt to be mistaken for mania, or, in females, for a modification of hysteria; and in this manner the dangerous nature of it has sometimes been overlooked, until it proved rapidly and unexpectedly fatal. It sometimes commences with depression of spirits, which after a short time passes off very suddenly, and is at once succeeded by an unusual degree of cheerfulness, rapidly followed by maniacal excitement. In other cases, these preliminary stages are less remarkable; the affection, when it first excites attention, being in its more confirmed form. This is in general distinguished by remarkable quickness of manner, rapid incessant talking, and rambling from one subject to another, with obstinate watchfulness, and a small frequent pulse. Sometimes there is hallucination or conception of persons or things which are not present, but in others this is entirely wanting. The progress of the affection is generally rapid; in some cases it passes into convulsion and coma; but in general it is fatal by a sudden sinking of the vital powers, supervening upon the high excitement, without coma. The principal morbid appearance is a highly vascular state of the pia mater, sometimes with very slight effusion betwixt it and the arachnoid. The disease is one of extreme danger, and does not in general admit of very active treatment. General bleeding is not borne well, and the treatment must in general be confined to topical bleeding with purgatives, antimonials, and the powerful application of cold to the head The affection is most common in females of a delicate irritable habit, but also occurs in males, especially in those who have been addicted to intemperance. I have however seen it in one case, in a gentleman between 40 and 50, of stout make and very temperate habits. The cause of death is obscure; it seems in general to be a sudden sinking of the vital powers, supervening upon the high excitement without any of the actual results of inflammation."

We think that most of our readers will be struck with a general resemblance between the affection thus described, and that class of manaical disorders or hallucinations which attacks hysterical or debilitated women, and intemperate men. It is a class of affections characterised rather by the excitement of the nervous than the vascular systems, frequently benefitted by what tends to lull the irritability of the former, almost always injured by active measures directed against the latter. The pervigilium, quickness of manner, incessant talking, and small frequent pulse are symptoms that with little alteration or addition would fit the delirium tremens, as well as if they were made for it. They bear too a striking resemblance to the characters of some of those puerperal affections so well described of late by Dr. Gooch. But to revert to our author, it seems that since the first edition of his work he has modified his opinions on the treatment of the disease, and now recommends more stimulating measures. On a question of such practical, we may really say vital importance let Dr. A. speak for himself.

"The above remarks on this highly dangerous and interesting affection, I leave as they stood in the first edition of this work. Since that time I have seen several examples of it, and have been induced to adopt a different mode of treatment, which seems to promise some interesting results. Without at present venturing upon any general conclusions, I shall merely submit the following case.

"CASE XVIII.—A lady, aged about 38, was recovering from her eleventh accouchement, when, at the end of a fortnight, she became affected with a deep-seated hard swelling in the right side of the pelvis, which was tender to the touch, and was accompanied by a considerable degree of fever. After repeated topical bleeding and other remedies, the febrile state subsided, the swelling lost its tenderness, and seemed to be gradually diminishing in size; but its progress was very slow, and after three or four weeks, she was still confined to bed, and suffering a good deal of uneasiness; her pulse was now calm, but she was considera-

bly reduced in strength. At this time, she became, one day, alarmed and agitated by some family occurrence, and immediately began to talk wildly and incoherently, and after a restless night was found next day in a state of the highest excitement, talking incessantly, screaming and struggling, with a wild expression of countenance, and a small rapid pulse. She was treated by topical bleeding, laxatives, cold applications to the head, &c., but with little or no benefit; and on visiting her on the following day, I found her sitting up in bed, with a look of extreme wildness, both her hands in constant motion, talking incessantly and wildly; and I learnt that she had not ceased talking for one instant for the last twelve hours. Her pulse was now rapid and feeble, and her countenance expressive of exhaustion. In consultation with a highly intelligent friend who had charge of the case, I mentioned my experience of the fatal nature of the affection, and proposed to make trial of treatment by stimulants A glass of wine was accordingly given, with evident abatement of the symptoms; and it was ordered to be repeated every hour. At the end of the fourth hour, she was perfectly composed and rational, her pulse about 90 and of good strength; and from this time there was no return of the symptoms. The tumour in the right side increased in size, suppurated, was opened, and healed favourably. From this time she continued in perfect health, and has since passed through another accouchement in the most favourable manner.

"This case I have given as another example of this interesting affection. I have employed the same mode of treatment, with similar benefit in several other cases, both of males and females. The chief difficulty is in deciding upon the particular cases to which the stimulating treatment is applicable. They appear to be those in which the excitement is accompanied by a small and rapid pulse, and an expression of paleness and exhaustion. When these characters are present, however violent the excitement may be, I have not been deterred from the practice, and in a considerable number of instances have found much reason to be satisfied with it. I have tried it, but without the same benefit, in some of the common cases of insanity, accompanied by paleness and bodily weakness, but with a natural pulse. When there is frequent and strong pulse, with flushing and other marks of increased vascular action, it would of course be injurious."

The above results of much experience and acute observation are well worthy the attention of our readers.

XXV.

FLOUR THE GREAT PANACEA FOR BURNS AND SCALDS. By Dr. WARD of Manchester.

Of all enthusiasts, scarcely excepting the religious, surely none are so mad as professional visionaries. Once a week or so we get a certain cure for tetanus or hydrophobia, which the discoverers are not content with devoutly crediting themselves, but they are mightily indignant if any one should evince the slightest hesitation in following their example. For our own parts we are astonished, after all the uniformly successful modes of treatment which are daily issuing from the press for all the obstinate or incurable diseases, that any whatever should remain to be treated. What a happy world it will be by and bye, when nosologies cease to exist; when cancer, scrofula, organic diseases are forgotten; and maladies are put out, as coats are cut in Laputa, on certain and mathematical principles. We are happy to inform our readers that burns and scalds will no longer afford any trouble to themselves or inconvenience to their patients, at least in such civilized countries as manufacture flour and contain kitchen dredgers. The directions for applying the panacea are extracted from a pamphlet published by Dr. Ward; the italics and capitals are all the author's own.

"Remove the clothes from the injured parts as soon as possible, (care being taken

to avoid bursting the blisters) then take a common KITCHEN DREDGER, and sprinkle the parts affected with flour, either till the pain subsides, or so much flour is applied as to form a defence or covering from a quarter to half an inch in thickness. *If the holes in the lid of the dredger be too small, or not so numerous as to allow the flour to escape freely, a table spoon, or the fingers, may then be used to sprinkle the flour equally and plentifully upon the burnt or scalded parts.* If the pain be removed by the flour, (*which has hitherto been the effect in every instance,*) the patient may then sleep, or take some mild nourishment, *and as long as the pain is easy nothing more must be done.* When it returns, more flour must be applied to the painful parts, *without disturbing those that are easy;* and this method must be continued as long as is necessary. In slight cases a few days will suffice to effect a cure. In serious and alarming ones, it will often be necessary to continue applying the flour a fortnight or three weeks, or probably longer.

"If the pain do not soon yield after applying a coating of flour of a proper thickness, (see above) the dredging or sprinkling must be continued, without regard to the quantity of flour used, either till ease be obtained, or the quantity be such as, if increased, would be inconvenient from its weight; then wait a while; and at the second and succeeding dredgings or sprinklings, the uppermost *loose* portions of flour, (if any) may be removed before more is put on. A piece of old linen must then be laid over the flour, and such bed-clothes or other coverings as are necessary to keep the patient warm, *but not too hot.*—If the head or face be burnt or scalded, a silk handkerchief forms a proper covering to keep the flour in its place.

"*N. B. In accidents of this kind happening to children, (young infants more particularly,) the use of flour has been found to produce ease and sleep almost immediately, after other means had been tried in vain.*"

That flour thus applied may be very useful in superficial burns we can very well believe, indeed we have used it ourselves many times. The powdered calamine is constantly employed for the same purpose and on the same principle, and although the "kitchen dredger" may not be in requisition we venture to say that very few "dressers" will be found in our hospitals who are without an apparatus for *dusting* calamine or some other absorbent powder on the burnt or blistered surfaces. A very common and very useful contrivance is a large pill or ointment box, covered with lawn or cambric and filled with the powder in question. Dr. Ward, however, brings forward the flour as a specific, or at least a remedy of universal application. We firmly believe that when the medical millennium, already so nigh, is arrived, when the profession consists of peaceable individuals, and when churchwarden Wakley is allowed on all hands to be a respectable sort of man: when, we repeat, the foregoing desirable events shall come to pass, flour and the kitchen dredger will be the only remedies in use for burns and scalds. Till then, however, we fear that the merits of these matters must not be viewed in so exclusive a light.

XXVI.

ON EMPHYSEMA OF THE LUNGS AS A CAUSE OF ASTHMA. BY B. H. COATES, M. D.; One of the Physicians to the Pennsylvania Hospital.*

The better informed members of the profession are now well aware of the abuses of the term asthma, as expressing an idiopathic disease. We venture to say that no more bulky tomes will be written on this subject, for, thanks to the cultivation of morbid anatomy, it is now ascertained that nine out of ten asthmatic cases are in point of fact instances of organic disease of the heart, great vessels, or lungs, We do not deny the existence of pure spasmodic asthma, but we do most boldly deny its

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* North Amer. Journ. July, 1829.

frequency, and assert without fear of contradiction that by far the greater number of patients who are treated for this disease, are in reality suffering from organic disease. Of all the affections the ignorance of whose real nature is plastered over on the part of the practitioner by this nosological salve, dilatations and aneurisms of the arch of the aorta are perhaps the most common. We have an instance of this under our notice at the present moment, in the person of an elderly man who has obviously dilatation of the arch of the aorta or innominata, and who was doctored and drugged for asthma. Dr. Coates has written a short paper in our American contemporary with the object of proving that emphysema of the lungs "is an abundant cause, or rather means of increasing and perpetuating" the disease, and we think the two cases which he brings forward are worthy of notice.

Case 1. "The notes of the following case were not prepared at the time. The dates are taken from records; while the description of the symptoms and of the morbid appearances, is drawn up from memory and inquiries. The statement of the results of dissection was subjected to the review and approbation of Dr. W. D. GALLAHER, who kindly assisted me in the examination.

"John Golder, a seaman, a native of New Jersey, aged about thirty-five years, was admitted into the Pennsylvania Hospital, August 18, 1828. He complained of the symptoms usually given as characterizing spasmodic asthma. His thorax was found of a large size, equal on the two sides and rounded. The motion of inspiration was quicker than that of expiration. On tapping the thorax with the fingers, and, about the same time, doing so to a person with healthy lungs, placed alongside of him, the thorax of Golder emitted a sound by far more distinct and hollow. The difference was perfectly perceptible to a number of auditors assembled together. No such difference was found between the opposite sides of the thorax. The respiratory murmur was much less distinct than in the natural state. No striking rattle of any character was perceived.

"The patient was pronounced to suffer under emphysema of the lungs. He was placed under the common palliative treatment; consisting chiefly of strong anodynes, of occasional bleedings, and light diet of easy digestion. Temporary relief was experienced; and, after several fluctuations, he took his discharge on the 30th of August; and in the night of the 28th or 29th of September, he sent for me to his lodgings. I found him in a violent paroxysm, of which he had frequent returns, rapidly increasing in severity and continuity, until the 2nd of October, when he died. These attacks were characterized by a dark and ghastly countenance, cold sweats, a pulse at last nearly imperceptible, incapability in general of resting in an inclined posture, and an anxious desire, even when excessively cold and unable to speak, of sitting by the open window. No other treatment remained to be tried than that employed before; and this was put in practice with exactly the same momentary relief. The patient had frequently complained of great distress in the central parts of his thorax; but *without any acute pain, tearing sensation, or other symptom particularly referrible to the arch of the aorta.*

"*Dissection.* On stripping the corpse, a slight projection of the upper bone of the sternum was observed. This had not been noticed during life. The body had lost much of its muscularity, but the cellular membrane was bulky.

"On opening the thorax, the lungs were found completely to fill the cavity, and did not collapse. The air cells were visible on the surface, and appeared about the size of millet seeds. Numerous small collections of air were also found in the cellular tissue of the lungs; as was evinced by the facility with which it could be impelled from one point to another with the finger. A small portion of serum was found in each pleura; which membranes were otherwise healthy. An unusual amount was also found in the pericardium; but this cavity and the heart was healthy.

"Behind the first bone of the sternum was found a large tumour of considerable solidity; which proved to be an aneurism of the arch of the aorta, embracing the origins of the arteria innominata, left carotid, and left subclavian. The sac was nearly as large as a man's fist; and had evidently been the cause of the projection of the first bone of the sternum.

"The trachea was found permanently changed in its figure where it had passed across the tumour. Its lining membrane was considerably inflamed; as was evinced by a smart red colour, and an increased amount of mucous.

"The abdomen presented nothing remarkable, and the head was not examined."

Dr. Coates believes that the aneurism was the original cause of the cough, the violence of which produced in its turn emphysema of the lungs and the asthmatic symptoms. Now we should be inclined to go even further than Dr. Coates and attribute the spasmodic symptoms themselves, or in other words the asthma, to the tumour. Whoever has opened the bodies of many persons dead of diseases of the heart or great vessels, must have noticed that a more or less emphysematous state of the lungs is not unfrequent, independently of any well-marked asthmatic symptoms during life. We are of opinion that emphysema of the lungs may be produced in such cases during the last days of the patient's existence, when the orthopnœa and dyspnœa are almost always distressing, the blood ill oxygenized, and the struggle of the respiratory system great. Who is not aware that during the short time that intervenes between the invasion of apoplexy and its fatal termination, the lungs will most commonly become œdematous and emphysematous, loaded with serum and air?

Case 2. "W——H——L, who died aged two years and five days, was the child of healthy parents, natives of Denmark, and appeared to possess tolerable health, till about ten months old. About this time, being towards the end of winter, she appeared to suffer from repeated colds. To these, however, the parents did not think the assistance of a physician necessary. No peculiarity was then noticed in her cough. Early in the summer of 1828, she became affected with cholera infantum; to prescribe for which, my friend, Dr. A. B. TUCKER was sent for Dr. T. treated the attack chiefly by astringents; and, after some teeth were cut, the child improved so much in health and flesh, that Dr. T. discontinued his visits. At that time the cough was not considered as of very particular consequence; and, about October, at eighteen months old, the child was weaned, in consequence of a deficiency in the supply of its parent's milk.

"About six weeks before its death, the child's cough became very severe, with great apparent danger of suffocation. It was found necessary to hold it upright during the paroxysms; which were convulsive and fatiguing. About the same time, it became subject to smart bleedings at the nose. It was observed to be worse after eating. An increased quantity of mucus was expectorated. It was partially relieved by syrup of squills, the only medicine which was given to it. A short time previously to its death, it was affected with diarrhœa; but whether this had been of long continuance, we have not ascertained. The parents suspected worms; as the child was observed to pick its nose. None, however, were discovered in its discharges. No symptoms were observed in any way indicative of pleuritis. Dr. T. was again called in, but found it in a dying state. The termination of its life took place soon after, apparently by actual suffocation.

"*Dissection*, April —, 1829, sixteen hours after death. Body not much emaciated; remarkably enlarged along the lower end of the the thorax. A small quantity of yellowish serum ran from the nose.

"*Thorax. Right pleura* contains about an ounce and a half of yellowish serum. Its surface, vascular, and redder than that of the opposite side. An adhesion of considerable firmness, an inch and a half long, and three

quarters of an inch wide, between the anterior part of the right lung and the mediastinum. Several large collections of *air* over various parts of the surface of both *lungs*; particularly a large one in the cellular substance of the before-mentioned adhesion, and extending in front of the pericardium. These collections principally affected the seams or lines of junction of the different lobules of the lungs. Their inner surfaces were smooth, interseoted at irregular distances, with imperfect partitions, and, in places, produced into long, polished tubes. Numerous thin whitish collections of tuberculous matter, arranged in granular masses, over the surface of the right lung. Lungs exhibit an unusual quantity of bronchial mucus when cut.

"*Left pleura* contains a little yellowish serum. A few of the same tuberculous infiltrations. Lungs otherwise similar.

"*Pericardium.* About half an ounce of yellowish, flaky serum in the cavity. Otherwise natural.

"*Thymus gland* and some adjacent *lymphatic glands*, hardened, nearly as hard as cartilage in some places. Whitish matter in some of the lymphatic glands. It appeared that the trachea, about its bifurcation, was pressed upon by the tumour.

"*Trachea.* Lining membrane, of a high, vascular redness.

"*Abdomen. Cavity* contains about an ounce of greenish serum.

"*Liver.* Not thought to be larger than belongs to the age of the subject (two years). Natural. Gall bladder full.

"*Stomach* natural. (Carefully examined.)

"*Intestines. Small intestines* examined in various places. No unnatural appearance detected, but a very considerable quantity of bile.

"*Large intestines* extremely contracted. Sides in contact, except the cœcum, which was of its natural size. Mucous membrane not at all reddened or ulcerated. Bile copious. Examined in the same way as the small intestines.

"*Head* not examined."

Neither is this in our opinion an unexceptionable example either of asthma or of emphysema of the lungs. Mere violent cough in paraoxysms is not surely the only characteristic of asthma, but it is the only one discoverable in the foregoing case. Such symptoms as these appear to us to be easily accounted for by the pleurisy and tubercular infiltration in the substance of the lungs. The partial extravasations of air were probably the consequences rather than the cause of the cough. The cases, however, are interesting in a pathological point of view, and we hope their perusal will stimulate our readers to prosecute zealously the examination into the many organic causes of asthmatic complaints. We assure them that the results will repay their trouble.

XXVII.

PARAPLEGIA AFTER APOPLEXY REMOVED BY THE MOXA AND EXHIBITION OF NUX VOMICA.*

There can be no question but that the nux vomica is occasionally useful in paralysis, and it is equally certain that it is not unfrequently pernicious. The following case recorded by Mr. Purcell in our provincial contemporary is apparently an instance of the good effects of the drug.

Case. J. R. æt. 25, robust and plethoric was seized on the 8th of August, 1828, with "sanguineous apoplexy," from which under proper treatment he had recovered on the 14th. On the 16th, he complained of numbness and loss of power in the left side which were removed by cupping, but on the following day numbness and tingling were felt in the lower extremities, increased during the night, and ended next morning in complete loss of power over the limbs. Partial sensibility remained; there was pain in the loins; pulse 96 rather full; bowels open by medicine; system under the influence of mercury. He had been already cupped and

* Prov. Med. Gaz. No. 11, July, 1829.

blistered and the same means were now repeated with evident relief. On the 3d of September, though much improved in his general health, the loss of power in the lower extremities continued, with a partial numbness in the upper. The use of a liniment, tonic medicine, and a light nutritious diet were prescribed, but without advantage to the paraplegia, and on the 17th Mr. Purcell commenced the application of moxas to the loins every other day and the exhibition of the nux vomica. The latter remedy was at first given in the dose of a quarter of a grain of the extract, (prepared in vacuo) every six hours, and a quinine draught was taken thrice daily. On the 30th he was so much improved as to be able to stand and even walk about with the aid of crutches. The nux vomica was gradually and cautiously increased to the extent of three grains every six hours, and three or four moxas were applied daily to the loins and along the course of the principal nerves of the extremities. From the 14th October to the 24th the patient took six grains of the extract every six hours, and at the latter date was able to walk as well as at any former period of his life. In the course of a few days he was able to resume his usual employments, the comparatively slight numbness in the upper extremities having been effectually removed by moxas along the course of the principal nerves.

This case does credit to the skill and perseverence of Mr. Purcell, and is worthy of record in these pages. The nux vomica does not seem to have produced any of its specific effects, as convulsive twitchings in the paralyzed limbs, and the dose to which the patient ultimately arrived, twenty-four grains of the extract in the day and night, was a large one. Can it be possible that the moxas had more to do with recovery than the nux vomica? This at least is certain, that the hemiplegias and paraplegias after apoplectic seizures in young men and women are not only rare occurrences, but, cæteris paribus, much more amenable to remedial measures, than palsy in persons at the turn or decline of life. This fact should be borne in mind in estimating the value of any specific drug in the former class of cases. One word in regard to the administration of the nux vomica:—we would advise practitioners to beware how they raise the dose of this formidable medicine, for it sometimes happens with it as with other poisons, that it silently accumulates in the system, and produces all at once an explosion of its effects on the constitution. We have seen convulsions and even something approaching to apoplexy ensue from its administration, and that where caution was employed.

XXVIII.

INTERESTING CASES OF APOPLEXY WITH DISSECTIONS.*

Of late years, the diseases of the brain have attracted great attention, and in truth they deserve it. Much has been done in morbid anatomy but much remains to do, and we know not a more promising field than the diseases of the brain and the circulating system, especially the connexion that exists between them. We have been turning our attention to this point of late, and perhaps some day we may lay the result of our observations before the profession. The following cases recorded by Dr. Mills are not unworthy of notice, as they illustrate some points connected with that formidable and too frequent disease—apoplexy.

Case 1. Mr. L——, æt. 40, of sedentary habits, complains (June 6th, 1817) of pain, heat, and heaviness in the head—weakness of the muscles of right eye-lid and right side of mouth—indistinct speech—indigestion—pulse 68, irregular—skin cool—tongue yellowish—fæces dark coloured. Has suffered from these symptoms for the last four months, has been attacked with epileptic fits within the last six weeks and has at

* Mills on the Morbid Appearances and Disorders of the Brain.

times been incoherent. *Leeches and cathartics.* Next day there was some stupor and occasional vomiting. *Blister to the nucha.* On the 8th there was paralysis of the right side of the face, and on the ninth delirium, which symptoms continued with little alteration till the 13th, when the ideas were less confused and the patient more disposed to conversation. On the 15th there came on strabismus, and on the following day coma, but on the 19th the patient was so far revived as to talk of going into the country. On the 20th, however, he was attacked with apoplexy and died on the morning of the 21st.

"*Dissection by Mr. M'Namara.* The mesentery is loaded with fat, and the bladder distended with urine.—The spleen is softer than natural, its peritoneal membrane bears evident marks of previous inflammation.—Liver, of a natural appearance.—Gall-bladder, distended with greenish yellow bile.—Kidneys, covered with fat and internally the calices are surrounded with fat.—Lungs and heart, of a natural appearance.—Pericardium contains half an ounce of a watery fluid.—The surface of the brain is highly vascular.—The lateral ventricles are considerably enlarged, and in them, at the base of the brain, and in the theca spinalis, are found three ounces of a serous fluid.—Plexus choroides pale."

It will be observed that in the foregoing case there was no hemiplegia, and no sanguineous partail effusion. Apoplexy from serous effusion into the ventricles, or even from mere sanguineous congestion of the venous system in the head is frequently unattended with hemiplegia, and rather appears to evince a disposition to give rise to coma and general paralysis. This is, cæteris paribus, a fact of considerable service in guiding our diagnosis, and even our practice with respect to blood-letting. In the following instances of hemiplegia there were sanguineous extravasations on the opposite side of the brain.

Case 2. Mr. B. æt. 55, a country gentleman, complains (Aug. 9, 1819) of headache, vertigo, heaviness about the head, accompanied by fever, and occasionally by pains in the stomach, nausea, or vomiting —face florid and flushed—heat of forehead great—pulse 96 and strong—palpitations at the heart—tongue yellowish and foul—fæces often morbid in appearance—urine frequently high coloured and depositing a pink or lateritious sediment. This gentleman has been accustomed to the use of fermented liquors; his complaint has been considered gouty, and various tonics, cordials, and bitters have been prescribed for it. *V. S. ad* ℥xij.—*cathartics.* The head was relieved by the bleeding, and on the 10th twelve leeches were applied to the temples, with so much relief that he became anxious to return into the country. On the 13th, however, after riding on horseback, he became gradually attacked with hemiplegia of the left side, for which he was bled, leeched, and purged. Delirium and vomiting succeeded, then stupor, stertorous breathing, and death on the 17th.

"*Dissection by Mr. M'Namara.* The dura mater exhibits evident marks of excessive vascularity both arterial and venous.—The veins on the surface of the cerebrum are very turgid.—The convolutions of the cerebrum are remarkably depressed.—On making a section of the brain a preternatural number of red vessels are discovered. In the centre of the posterior lobe of the right hemisphere is found a cavity of the size of a hen's egg filled with coagulated blood. The walls of this cavity are formed of the substance of the cerebrum, which is softened and of a bright red-colour.—The blood appears to have been furnished from a number of minute vessels observed on its surface, and not from the rupture of any large vessel, similar to what is noticed on the surface of the intestines in melæna.—The edge of the plexus choroides has an hydatid-like appearance.—In the ventricles are about three drachms of a serous fluid, and about six at the base of the cranium and in the theca vertebralis.—The cerebellum is preternaturally vascular.—The lungs are of natural appearance.

"The heart is enlarged and softer than natural, and its right auricle and ventricle are filled with a dark-coloured fluid blood.

"The liver, when cut into, is found to be exceedingly vascular.—The gall-bladder contains two gall-stones, irregular in their shape and of the size of French beans; there are several others considerably smaller.—The spleen is enlarged, softened and gorged with dark blood.—A large portion of the mucous coat of the stomach near the cardia is preternaturally vascular, some of the vessels have a florid appearance."

As Dr. Mills observes, the stimulants and cordials exhibited for gout most probably sent this poor gentleman to ORCUS before his time. Had more judicious antiphlogistic regimen been pursued at first, life might have been prolonged.

Case 3. "A. H. a country-woman, had a fit of apoplexy.—She was naturally robust and sanguine, but for some months had an earthy unnatural complexion, was dispirited and complained of sick head-ache.—Four years before this seizure she had a violent inflammatory fever, with pain in the epigastrium, which yielded to copious bleeding and the antiphlogistic regimen.—It was succeeded by symptoms allied to mania. Though free from fever she talked incessantly, and nevep slept, but wandered about all night. Her manner was forward and immodest, and the powers of her mind were powerfully excited. She was prompt in her replies, positive in all her opinions, and on all subjects employed a copious eloquence. These symptoms yielded to free purging.

"After the attack she was insensible, and the right side was motionless, but she frequently lifted the left hand to her head, and the leg of the same side was violently moved. The power of swallowing was gone, but the sphincters were closed.—Free bleeding from the external jugular had no effect, and she survived the attack only twenty-four hours.

"DISSECTION.—The dura mater adhered firmly to the cranium.—The finer membranes were manifestly inflamed; between them there was an extensive effusion of bloody lymph, which reddened the surface of the cerebrum.

"As was suspected, the greatest mischief was on the left side of the brain; the anterior half of which was completely injected with blood. A large coagulum, which had evidently proceeded from the rupture of innumerable diseased vessels, filled the left ventricle, and had broken down the thalamus nervi optici of that side, and the corpus striatum.

"There was serum in all the other ventricles.—The cerebellum was surrounded by water; its surface was deeply inflamed, and in its substance there were many apoplectic cells."

Case 4. Mr. F. æt. 72, full and plethoric, of sedentary habits, has been subject (date 1818) for years to indigestion, vertigo, acute head-aches, and occasional slight paralytic attacks of the fingers or arms. On the 13th of April he was seized with apoplexy followed by hemplegia of the right side, and in a fortnight afterwards he died.

Dissection by Mr. M'Namara:—"The dura mater is extremely vascular, and the veins on the surface of the cerebrum are very turgid; the Archnoid membrane is raised from the pia mater by a serous effusion. The substance of the brain is firmer than natural.—A considerable number of red vessels is discovered on making a section of the cerebrum.—The ventricles are enlarged and distended with a watery fluid. In the middle lobe of the left hemisphere there is a regularly formed cavity, large enough to contain a hen's egg, this cavity is filled with grumous blood and its surface is of a bright claret colour.—On cutting through the cerebellum a small clot of blood is discovered.—About four ounces of a serous fluid are found in the ventricles, the base of the cranium and the theca spinalis.

"The integuments of the skull, chest and abdomen are œdematous.—The omentum is fatty.—In the lining membrane of the stomach and intestines are several red patches.—The bladder is thickened and diminished in size, and on its mucous coat

are numerous red spots.—Lungs, healthy. —Heart, preternaturally large, a portion of the left mitral valve is thickened and contracted, and the semilunar valve of the aorta is thickened."

The foregoing cases though brief are extremely interesting; the following is one of a different character in some, though not all respects.

"J. L———, æt 30, weak in intellect and of a spare habit, was for several years employed as an attorney's clerk, and for sometime, was involved in pecuniary difficulties.—His appetite was good but his bowels were constipated, and he was subject to head-aches.

"On the night of the twenty-first instant he was attacked with what he called the night-mare, which he ascribed to drinking cold water at bed-time.—At ten o'clock, a. m., on the twenty-second, he was seized with general convulsions, followed bv stupor, stertorous breathing and dilatation of the pupils; spirit of turpentine was administered per os et anum, which acted as a cathartic.—About five o'clock p. m. the convulsions returned with violence; the wrists and ankles were considerably distorted, and the body was bent back with an inclination towards the right side; the vessels of the head and neck were turgid; the pupils were dilated, the tunica conjuctiva was red, and the breathing stertorous; there was frequent moaning and profuse general perspiration. Thirty ounces of blood were taken from the jugular vein and temporal artery at nine o'clock, p. m.—The head was shaved and blistered, and a fetid injection administered.—The pulse became small and irregular, and though the turgescence of the vessels of the head subsided, yet the convulsions, stertor, moaning, and dilatation of the pupils continued.

"Death took place at eight o'clock on the morning of the twenty-third of July, about twenty-four hours after the first attack of convulsions.—At three o'clock, p. m., the same day, the body was examined by Dr. Peebles.

"The contents of the abdomen showed no marks of disease.

"The superior and lateral portions of the brain were of a dark red-colour; there were about two ounces of coagulated blood at the medulla oblongata, and a quantity of turbid serum flowed from the ventricles and from beneath the Arachnoid membrane.—The vessels of the pia mater were turgid —The walls of the ventricles were dotted with numerous red points. On removing the coagula from the under surface of the brain the basilary artery was found ruptured, so as to admit a small quill into its canal below and behind the origin of the posterior cerebral arteries, the margin of the orifice was thick, and of a dull yellow-colour.—The diseased structure did not surround the whole artery, nor was there any appearance of an aneurismal sac.—About half an ounce of serum tinged with blood flowed from the spinal canal."

It is to be regretted that the account of the dissection is imperfect, the state of the blood-vessels of the brain, of the heart, and indeed of the circulating system generally not being specified. As it is, the case shews the description of symptoms usually produced by effusion of blood about the medulla oblongata, namely, convulsions rather than hemiplegia. With this we must conclude for the present.

XXIX.

REMOVAL OF PORTIONS OF THREE DORSAL VERTEBRÆ FOR PARALYSIS FROM FRACTURE.

The following case is recorded in the number of our valuable Transatlantic Cotemporary, the North American Surgical Journal, for July of the present year. It is published in the form of an extract from a letter of the operator Alban G. Smith, M. D. of Danville, to Dr. B. H. Coates.

"About two years since, I was called a distance of about twelve miles, to a place called Pleasant Hill, the residence of a community of the people commonly called Shakers, to see a young gentleman, a member of the society, who had fallen from a

horse, and had become paralysed in all the extremities with the exception of the muscles above the elbow joint. Upon examining the spinous processes of the vertebræ, I found that one of them was thrown to the right side, to the distance of about a quarter of an inch. Concluding that the whole of the vertebra, body and all, was dislocated, I told him that, in all probability, the case would soon terminate fatally; and merely directed some cups to be applied to the parts adjacent, with low diet, and some gentle cathartics. Since then I heard but little of the case, except that he was still alive, until a few weeks ago, Dr. THOMAS, the physician of the society, and his brother came to see me, at the earnest request of the patient, stating his importunities, that if I thought there was a possible chance of relief by any process, I would attempt it; as death was far preferable to his present situation. They informed me, at the same time, that Dr. DUDLEY had been called to see the case, had made an incision down to the bone, and had given it as his opinion, that the body of the bone was not dislocated, but that one side of the base of the spinous process was broken and pressed in on the spinal marrow. Having implicit confidence in an opinion emanating from such a justly distinguished surgeon, I told them that I would come down, and if upon examination of the case, the state of his general health appeared to admit of any probability of its success, I would attempt to remove the pressure. Accordingly, in a few days, I went down; and after I had represented to him the few chances of success, the difficulties of removing a part so tied down without fatal injury to the spinal marrow, and also the probability of the injury sustained by the spinal marrow itself being so extensive that the powers of nature might not be sufficient to resuscitate it, he replied that, if there was one chance in a thousand of its being of any kind of advantage to him, he wanted the attempt to be made. After sending for my friend, the accurate anatomist, Dr. H. MILLER, who concurred with me as to the propriety of the operation, I proceeded. I made an incision, about five or six inches in length, along the spinal ridge, and then two deep incisions, transversely to, and at each extremity of the former, and three inches and a quarter in length, all down to the bone. I then dissected all the muscles and ligaments as far as the heads of the transverse processes, and scraped the bone clean. The situation of the parts was found as Dr. DUDLEY had described them; the fragments being pressed to one side, but so completely united, and so smooth on the upper surface that the line of separation was not very well marked. I next took a small Hey's saw, and made an incision on both sides, as near the base of the transverse processes as I could, as deep as I could with safety to the spinal marrow and the nerves going off at the sides, and long enough to cut through the bone above, about half way, which was the third dorsal vertebra. I then sawed off the end of the transverse process of the second, and into the transverse process of the third, about half its base. Then, taking a very strong tooth forceps, with its ends turned on one side, and getting a claw in each incision made by the saw, I was enabled to break up the external plate, and part of the internal; so that I could now, with a small strong pair of pliers or forceps, break, by a small piece at a time, the whole of the bone that I had cut round with the saw. Here the anatomist will see the difficulties with which I had to contend; as the parts are so firmly and securely tied down with ligaments. Thus it will be seen that I took out a part of the spinous processes of two vertebræ, half of the third, and the whole of the fourth; the fourth being the bone which seemed to be the most depressed. I now brought the parts together, putting a tent at the bottom; and put him to bed. He had a chill, succeeded by a fever, and some bilious symptoms, which were carried off by a dose of calomel.

"I saw him in a week afterwards. The ulcers in his gluteal muscles, which were produced by lying on his back, were healing up; and he had some additional sensa-

tion in his hands. Since then I have not seen him; but I entertained considerable hopes.

"I wrote the above several weeks ago: I have since received two letters from his attending physician, and have sent my student down; by all which means I am informed that sensation is returning as rapidly as he can bear it. The pain of returning feeling is so great that he complains very much. It is something like the sensation experienced when 'one's leg is asleep,' as it is vulgarly expressed. His general health is good; and I have but little doubt of his being soon entirely restored to the use of his muscles. Should I ever be called to a case of the kind again, I would advise an immediate operation."

Since the date of that report, "feeling has got down into the patient's thighs," much to his own delight and the surgeon's gratification. The case is of so interesting a nature that we thought it right to transfer it to our pages, although we candidly confess that we differ from the enthusiastic author in the conclusions to which he has come. We believe that there are very few cases indeed of fractured spine which justify an operation, and not one in a thousand that would be bettered by its performance. In the instances of recent injury who can tell that the arch only is broken or depressed, the medulla or its membranes unscathed, and the body of the bone unbroken? We know, by dissections, that the body most frequently *is* implicated, and who, we ask, aware of this fact, would venture on a tedious, doubtful and coarse operation? Cæteris paribus WE would not. In the present case, however, this step was had recourse to for the *secondary* rather than the primary consequences of the spinal injury, and so far it would appear with a certain degree of success. In the nearly analogous injuries of the head the secondary symptoms have sometimes required and been benefitted by the use of the trephine, but they have not seldom been aggravated or the patient even destroyed by its employment. Of this we witnessed an instance last year. If the operation then on the head under such circumstances maintain an ambiguous character, how much more precarious must be that upon the spine! The true bearing of the case appears to us to be this:—In the majority of the cases of really severe spinal injury the patient will not survive the primary stage; but if he should do so the presumption is that he will either recover from the effects of the mischief, or remain more or less paralytic for a time, and ultimately sink exhausted, whilst in neither contingence will an operation be proper. There may be one or two rare combinations of circumstances, such perhaps as in the present instance, vindicating the employment of the trephine or saw, but we believe that these are Oases in the desert, and that the great, the very great proportion of cases are not of this pleasing description.

XXX.

LITHOTRITY AND DILATATION OF THE URETHRA, FOR STONE IN THE FEMALE BLADDER.*

The following case is particularly valuable at the present time when the question of lithotrity is *boring* some good folks' brains very sadly. The Matty Marvellous's of the profession will be amazed to find that the new method can prove, under any circumstances, less expeditious or more difficult than the old one, but nevertheless the fact is so. We have reason to know that an eminent, we may say the most eminent, surgeon in this good city was foiled in lithotriting a stone in the female bladder not a hundred years ago. But to the present case; which is recorded by Mr. James Wilson.

"Mrs. H., æt. 68, had been subject to calculous complaints for 20 years, and had passed many small stones; for several months she had voided none, and her suffer-

* Glasg. Journ. No. VIII.

ings were become greatly aggravated. On introducing a sound a large stone was easily felt. I was induced, in this case, to try lithotrity; 1st, on account of the very favourable reports given of that operation; and, 2dly, because the stone in this case appearing to be very large, it was probable that by breaking it down, the fragments might be easily removed by dilatation of the urethra. I was aware that in two cases in which dilatation of the urethra had been tried here, the stones, from their very large size, required a great deal of force for their removal; this, doubtless, was the cause of incontinence of urine, which continued in both cases for a considerable time.

"On the 8th of August, after filling the bladder with warm water, Civiale's instrument, *à trois branches*, made by Weiss, was easily introduced, and placed in contact with the stone. It was found, however, that the bladder could not be kept distended, the injected fluid escaping by the sides, and also through the centre of the instrument, which I have no doubt added both to the difficulty and danger of the operation. Some of the lithotrity instruments are so constructed, that without their removal, the bladder may be distended by injection. The want of such an apparatus in the instrument which I employed, was found to be a serious defect. Many unsuccessful attempts were made to grasp the stone, and there was good reason to think, that when the bladder became empty on the escape of the fluid, and contracted round the stone, its coats became entangled in the claws of the instrument. Much irritation was occasioned, and a considerable discharge of blood took place. At length, by raising the patient, who till now lay in a horizontal position, to a semi-sitting posture, the stone was partially seized, and drilled to the extent of a quarter of an inch. It then became necessary to change the position of the stone, in order to present a new surface for trituration, but it could not again be laid hold of, and the instrument was withdrawn, after continuing the attempts for at least three-quarters of an hour. The patient was a good deal exhausted. Sixty drops of tinct. opii were given, and strict antiphlogistic treatment enjoined. No feverishness followed, and the pain, though severe, was certainly less than might have been expected from the irritation produced by this operation. Some days afterwards, the paroxysms of pain occasioned by the stone became very frequent, and so severe, that on the 18th, ten days after the attempt at lithotrity, it was deemed necessary to do something for the removal of the calculus. From the total failure of the former operation, it would have been wrong to have subjected the patient to a repetition of the same risk, without the probability of removing the stone, which there was no reason to calculate upon, in a second trial. The plan, therefore, of dilating the urethra was adopted, and performed with Weiss' dilator with the most perfect success. The dilatation to the extent of an inch and half was completed without much pain in ten minutes; a pair of strong forceps were introduced, and the stone soon laid hold of. It appeared to be very large, and I found a good deal of resistance was to be offered to the extraction. The forceps was then very firmly grasped, in order that the hold might not be lost, when fortunately the stone gave way, and was reduced to many fragments, which were easily removed by the forceps, scoop, and repeated injections. A dose of tinct. opii was again given. No bad symptom followed, and far less pain was experienced, both during and after this operation, than the former. On the second day, the patient was able to retain her urine, and to void it with ease in ordinary quantity, which she has continued to do ever since.

"It would, perhaps, be unfair to draw any conclusion unfavourable to lithotrity, from a single, probably imperfect, and unsuccessful trial, at least on comparing it with lithotomy, which is always a hazardous operation; but in this instance it is perfectly legitimate to compare it with the operation of removing the stone by dilating the female urethra. A better opportunity could not have been found for forming a comparative estimate of the respective value of these different operations, and of showing the de-

cided superiority of the latter over the former. Both opertions were first attempts by the same operator, and therefore may be supposed equally unskilful, and both were performed on the same individual with a very short interval of time between them. If there was any difference, that difference was in favour of lithotrity, for at the commencement of dilatation the bladder was in a much more irritable state, than at the commencement of the former operation.

"Since the above, I have seen the operation of dilating the urethra performed by Dr. M'Farlane, on a girl three years and four months old. The dilatation to the extent of an inch was effected by the same dilator in ten minutes, and a stone the size of a pigeon's egg, extracted without difficulty. This girl was able to run about next day. Some incontinence of urine continued for a week or two, which has now gone off, and she is quite well."

There is this to be said in favour of, or against lithotrity, that as the management of the instruments for its performance requires more experience and tact than that of Weiss's dilator, so the odds were vastly in favour of the latter with a person equally used to both. At the same time we must say that the balance of simplicity, celerity, and efficacy appears in this instance to have been on the side of dilatation.

XXXI.

ON THE USES OF THE OIL OF TURPENTINE.

This powerful remedy is in all probability not applied at present to many uses for which it is adapted. Its nauseousness and the disagreeable effects which it produces are great objections to its employment, but these may in some degree be got over by giving it in the form of emulsion in an aromatic water. At all events its actual powers are worth ascertaining by experiment, and on that account we are induced to notice a short paper by Dr. Moran, contained in a Journal for which we have to thank a friend:—The EDINBURGH MONTHLY EXAMINER

"Having suffered several months," says Dr. Moran, "from an obstinate intermittent fever which would not yield to large doses of bark or sulphur, I was led often to reflect upon the cause and its removal of the various forms of fever, until, as I judged by the best and most concise reasoning, as above explained, I formed the plan of cure; therefore, as an expulsive and correcting evacuant, the Ol. Terebinthinæ, a medicine I have been in the habit of employing in the cure of many diseases for several years past, an account of which I shall give in the sequel, struck me as being likely to produce a good effect.

"It was double tertain, and the paroxysm I found about 7 o'clock in the evening, to be coming on. I mixed two ounces of the Ol. Terebinthinæ well in sugar and water, and drank the whole at once.—it created a warm glow in a short time, first in the stomach, and afterwards generally over the frame. I by no means found it so unpleasant as I had expected; I had to observe a reclined and quiet posture to prevent the stomach from rejecting it, which more than once nearly happened, in the course of 20 minutes from the time of taking it; I perceived the violet odour in my urine, and from the moment I had taken it, all symptoms of the paroxysm disappeared, and from that time, ceased altogether. In about an hour it produced violent Catharsis, which lasted for several hours, and micturition attended with neither stranguary or uneasiness in the act; the violet smell continued for eight days in the urine, shewing how permanent and diffusive its action must have been; after this, I treated other cases of Intermittents and other fevers with the same remedy, with decided advantage, the only precaution I think necessary in its exhibition is, that it must not be given unless the stomach be empty, nothing to be taken after it until the Catharsis has commenced, when some whey, tea, or warm broth may be plentifully used; if taken on a full stomach, or if food be taken after it, it violently attacks

the head, and produces a state like Epilepsy, which I twice witnessed, but relieved each by causing the patients to empty the stomach, after which they felt quite well; its dose may be from half an ounce to one ounce mixed with honey or sugar.

"From the trials I made with it, I can recommend it as a safe and very useful medicine in fevers of all descriptions, but I by no means wish it to be understood that it is to do away with blood-letting whenever required; on the contrary. I in all cases when necessary, recommend venesection before hand, but I am strongly of opinion that its use may cause many of the medicines used in fever to be dispensed with.

"From what I have above said, it will follow of course, that I recommend the use of Ol. Terebinthinæ in the plague, which I do most confidently, as a medicine capable of removing, correcting, or controlling the cause of the disease; but it should in all cases be had recourse to, at the commencement, before habit be confirmed, the vital powers much diminished, or functions destroyed; by a steady and careful exhibition of it in febrile or other diseases, joined with blood-letting when indicated, I have no doubt by recommending it, I shall have the heart-felt satisfaction to find that I have conferred a benefit on mankind, and that I have contributed my mite at least to the alleviation of much human suffering.

"Among the diseases of the order Phlegmasia, I treated, but Enteritis, Peritonitis, Rheumatismus, and Podagra, with the Ol. Terebinthinæ; but had I an opportunity, I think it could be employed with great advantage, in Hepatitis, both acute and chronic, as also in several others of the order. In Enteritis and Peritonitis, I premised a bleeding, and gave an ounce and a half mixed as before, after which the symptoms all quickly subsided; for its use in this disease, the public are indebted to the eccentric but clever Doctor Brennan of Dublin, who pointed it out many years ago as of the greatest use in puerperal fever, who is richly entitled to the thanks, at least of his country-women, for so valuable a remedy.

"In Rheumatisms both acute and chronic, I found it, after having premised a bleeding, to act in the most satisfactory manner, and remove the disease. I was myself seized with inflammation of the great toe as I first judged it to be, for which I tried all the usual remedies, such as poulticing, local bleeding, blistering, &c., but all to no purpose for several days, when I discovered that it was an attack of gout; the fever I found came on every evening, and lasted until morning, when, after having writhed in agony all night, I obtained some repose, and continued free from pain all the next day, and in other respects well except the pain, and inability to use the feet. I soon perceived the similarity there was between the fever that accompanied it, and the obstinate intermittent I before made mention of, I therefore had recourse to the remedy that had so quickly removed it, in the same dose, and I had the pleasure to find that it was equally efficacious, the fever from that moment entirely ceased, and in a few days I was as well as ever.

"I was twice afterwards threatened with an attack of gout, but a dose of the medicine as often prevented it; in the latter case I was seized in the night, and in the morning I could not use the left foot or leg; to put it to the ground was a thing impossible, I sent for a dose of the medicine, which I took, and had the part well rubbed with some of the same; in about three hours afterwards, or after the medicine had had an effect, I was well, able to walk about, and travelled in a boat all night, and continued up to the present time, without any symptom of it, though my manner of living be the same. I feel so confident of being able to prevent its attack, that I by no means feel the least alarm at any inconvenience from gout; but also to prevent it, I strongly recommend bathing the feet night and morning in cold water, and never to place them in warm, paying attention always to the state of digestion, &c. of the bowels.

Since then, I have had an opportunity but once of trying its effect, and that was on a woman of fifty years of age, with

irregular gout, upon whom the medicine had the desired effect, and soon put an end to her suffering, after which she enjoyed much better health than for many years before. In hysteria and Hysteritis, I have every reason to think its use would be attended with great benefit to the sufferers, but I have had no opportunity of trying it.

"In Hæmorrhois I have used the Ol. Terebinthinæ with success, and also in internal Hæmorrhage from the stomach, I am inclined to think it would be useful in Hæmorrhois petechialis.

"In Catarrhus, both acute and chronic, after having premised a full bleeding, I used it repeatedly with great success, the symptoms having all quickly subsided after its use.

"In dysentery, which is but a catarrhus of the mucous membrane of the intestines, I used it also with success, but I gave Calomel in doses of 10 grains with it, together with fomentations, bleeding, and such treatment as the severity of the symptoms required.

"In Apoplexy, I have had no opportunity of using it, although I think great benefit might be derived from it in that disease.

"In Paralysis, I found it a valuable remedy, used as an embrocation, a cathartic, and also mixed with honey in small doses as an alterative. In this disease, I first witnessed its exhibition in Jervis Street Hospital, Dublin, when a Student under Dr. Francis Brooks, whose sauvity of manner alike engaged the confidence of the patient, and the attention of the pupil.

"In Dyspepsia, Hypochondriasis and Chlorosis, I mean to use it whenever an opportunity offers.

"In Cholera Morbus I have used it with great advantage in many cases of the very worst description, in the following manner. The moment the patient was admitted he received 10 grains of Calomel, and the Ol. Terebinthinæ mixure; I then had him placed in a hot bath, and well rubbed while in the bath, all over the body,—after 20 or 30 minutes he was taken out, well rubbed with flannels, and carefully laid in bed between hot blankets. After which 100 drops of the Tincture of Opium in Camphor mixture was given; he very soon was thrown into a copious perspiration, followed by sleep, after which the spasms and vomiting gradually subsided. The following morning 5 grains of Calomel exhibited, and 60 drops of Tincture of Opium at night entirely removed the disease—a second dose of the medicine was rarely required. I have had many cases brought into Hospital more resembling dead than living beings, the debility and exhaustion was so great, yet from cases such as those I was occsionally obliged to extract blood. After the bath the reaction was so great that I found the use of the lancet indispensable; and here I would advise in all cases after reaction has set in, when the face and neck assume a crimsom colour, or a colour approaching to rose pink, that blood be extracted without loss of time, otherwise the loss of life will be almost certain. I am thus led to advise from experience, for at first I was much averse to bleeding in the disease, until I met with such a case as the above, in which I withheld the use of the lancet, but the patient died, and the appearances on dissection, shewed me that he died from extravasation at the base of the brain, congestion in the vessels, and effusion into the ventricles and between the membranes. After this, in all cases of that nature I have used the lancet with the most decided advantage, never having afterwards lost a case. This practice I hope may prove a benefit to our suffering soldiers in India, at all events I strongly recommend its adoption to the board of Directors, and if it prove as successful as I have found it, it will be no small degree of comfort to me to have pointed it out. To Sir James M'Grigor too, who is ever alive to promote whatever may tend to remove disease, and who has already laboured to that purpose with so much effect, I very respectfully suggest its adoption by those under his controul, in whose hands, if it prove of benefit to the soldiery, I shall have a soldier's feeling, that of having done my duty.

"In Hydrophobia I would suggest its use by general frictions and internal exhibition,

joined with Calomel and Tincture of Opium.

"In Anasarca, and Ascites, I found it of great use given with the Squill Pill and Calomel. In recent cases and young people I have not found it fail in removing the diseases.

"In Jaundice I found it an excellent remedy, together with Calomel and Hot Bath.

"In cases of Worms of all kinds, whether in children or adults it may be given with safety and advantage, in doses from one drachm to two drachms; mixed with honey and water.

"In cases of Snake bite, I gave it with marked success. The recital of one may be necessary to shew the treatment pursued, viz:—

"A man was brought to the Hospital, who had been bitten by a black Snake, about half an hour before, or such time as enabled him to arrive in a quick pace a distance of a mile. The bite was situate over the radial artery of the right arm, to which the Snake had clung for several seconds so firmly, that shaking the arm strongly did not remove him, until removed by another person. When I saw him the greatest terror and anxiety were marked in his countenance, which was also red and tumid, the eyes dull and heavy, and the adnata suffused with red vessels. He complained of a violent desire to sleep, and expressed himself that he would give the world to be permitted to lie down. I gave an oz. of the Ol. Terebinthinæ in a mixture with sugar and water, and had the arm bound with a ligature above the elbow; I cut out as much of the bitten part as I could with safety in the situation it was in, and had the wound rubbed with liq. Carb. *Ammoniæ*, then the whole arm was immersed in hot water, and rubbed down between the hands from the place where the ligature was applied to the wound. After this I extracted 2lbs of blood from the arm, and ordered two drachms of the Ol. Terebintbinæ to be given every quarter of an hour, until it produced a Cathartic effect. The great desire to sleep continued for several hours, but the patient was kept awake by being made to walk about supported by two men. The medicine began to operate in about an hour, and continued to do so for two hours, after which the head became relieved. In eight hours after admission, he was permitted to sleep, after which he awoke without uneasiness, his mind being perfectly cheerful and composed. Several other cases were treated in the same way with similar results, but in neither of them was this kind of Snake seen, it therefore cannot be so much relied on as the first, in which the Snake was seen for several seconds hanging on the arm by the teeth."

We need scarcely say that, however, we may disposed to admire the good feeling and honest enthusiasm of the author, we cannot go along with him in all his speculations and all his hopes. Cholera, alas! and the plague will ravage and destroy, when the oil of turpentine and its advocate shall perhaps have been forgotten. Neither are rheumatism and the gout to be banished from the nosologic chart or the human frame, at least whilst man shall suffer from cold or enjoy good living. At the same time the foregoing observations on the medicine, when taken cum grano, are interesting, and may furnish a hint or two to those who have wit enough to discriminate what is fact from what is fancy. We need scarcely say that we devoutly believe all *our* readers are of this description.

XXXII.

VACCINATION COMMUNICATED FROM THE MOTHER TO THE FŒTUS IN UTERO.

If the following case is a fact it is curious, if it is not we cannot help it. It comes as well authenticated as many other statements, which pass current for good coin in the scientific course of exchange. It is extracted from the *Kongl. Vetenskaps Academiens Handlingar de* 1817, by the editors of the Journal de Progrés, from which we take it at second hand. It seems that the members of the Academy of Sciences of Stockholm

were informed that a woman, who had been vaccinated nine days before her confinement, had given birth to a child which in a few days presented the vaccine vesicle. The learned body in question immediately took steps to investigate into the accuracy of the statement and addressed the requisite enquiries to a clergyman, by name Sedenius, residing at Degerfoss near Umea, amongst whose parishioners were the parents of the child. The clergyman immediately repaired to the spot in company with the sacristan who had vaccinated the woman, and after having taken depositions from the parents and other persons in the same house, he transmitted the following report to the Academy.

"The peasant Maja Brita Andersdotter, living at Oefver-Koede By, aged twenty-one years and pregnant for the first time, was vaccinated on the 3d of April, 1813, by my sacristan Rheu, the vaccinator of the parish. On the 12th of the same month the vesicles were so well formed that Rheu took some vaccine from them at 8, a. m. At 4, p. m. the woman Andersdotter was brought to bed of a healthy female infant who was shortly afterwards carried to the baptismal fount, two leagues from the parent's house. The child was brought up by hand with fresh cow's milk and throve well, but at this time it was perceived to have upon its arms the regular vaccine tubercles, in the same number and at the same points as those which had previously appeared upon the mother. The tubercles went on to maturation, left cicatrices after them, and agreed in every respect with those upon the mother. The child went on well for about six weeks, when it died after three days illness from an accidental affection of the chest and stomach."

Many remarks and more speculations might be made upon the foregoing statement, supposing it accurate in every respect. We prefer, however, giving it to our readers as we find it.

XXXIII.

PARTIAL RAMOLLISSEMENT OF THE BRAIN, ACCOMPANIED WITH REMARKABLE SYMPTOMS.

The following very interesting cases are taken from the second edition of Dr. Abercrombie's excellent work on the Diseases of the Brain and Spinal Cord. The phenomena do not square with the commonly received notions respecting affections of the head, but facts are more valuable than prejudices, and the quarter from which the present emanate is a sufficient guarantee for their accuracy and truth.

Case 1. "A gentleman, aged 26, of a plethoric habit, had suffered occasionally for two or three years from headach and vertigo, which were always relieved by depletion. On 12th April, 1827, while walking out, he was seized with confusion and giddiness, embarrassed speech, and a considerable degree of paralysis of the right leg. He was rather pale; his pulse was 70 and soft; and he did not complain of any headach. The usual treatment was adopted with activity by Dr. Combe of Leith, without much relief. On the contrary, after several days he began to complain of acute headach, accompanied by vomiting and hiccup; and the other symptoms continued nearly as before,—his speech being labored and slow, and his memory very defective. After some weeks those symptoms subsided so that he was able to walk out; but the headach continued with frequent vomiting. The pain was chiefly referred to the left side of the head, sometimes to the occiput, and there was occasional numbness of the right arm. When I saw him, along with Dr. Combe and Dr. Kelly in July, his chief complaint was of frequent and irregular attacks of vomiting, occurring daily, or repeatedly during the day. It came on very suddenly, without previous nausea, and he was often awakened in the night by the sudden attack of vomiting. He had now a pale sickly look; there was no paralytic affection, and little complaint of headach;

though he still had occasional uneasiness in the head, sometimes referred to one part of it and sometimes to another. When he did refer it to a particular part as the principal seat of the pain, it was either the left temple or the occiput. But the headach at this time was slight and transient, and the symptoms in the stomach were so much the more prominent, that it was a matter of much doubt whether there was now any fixed disease in the head. The vomiting was much relieved by the oxyd of bismuth, so that he was free from it for several days. But it soon returned and went on as before, with increasing debility, great listlessness, and bad appetite; pulse little affected. He had now a peculiar unsteadiness of his limbs, so that on first getting up into a standing posture, he staggered very much and required some time and attention to steady himself When he had accomplished this he walked with tolerable firmness. The symptoms went on in this manner till the 27th of October, when he was suddenly seized with violent and continued convulsion, and died in nine hours.

"*Inspection.*—In the substance of the middle lobe of the left hemisphere of the brain, about the level of the lateral ventricle, there was a portion in a state of complete ramollissement, about an inch and a half in length, and an inch in its other dimensions, and the neighbouring parts appeared unusually vascular. The tuber annulare and Pons Varolii were softer than usual, but otherwise healthy. No other morbid appearance could be discovered in the head, and all the other viscera were healthy.

"It is unnecessary to point out the very remarkable features of this case. The sudden attack so closely resembling the ordinary paralytic attack, must have been connected with the commencement of the inflammatory stage. The remarkable symptoms in the stomach in the farther progress of the disease, and the mode of its termination, make it altogether a case of great value in the pathology of this remarkable affection."

The connexion between disorder of the stomach and affection of the brain, in other words the sympathy between the organs, though frequently difficult to explain is still sufficiently established. Every body knows that a blow upon the head produces vomiting, and an attack of appoplexy is often preceded by nausea and a disposition to sickness. But it is in chronic diseases of the encephalon that we witness this mysterious sympathy most curiously displayed, and cases have occurred in which sickness or other disorder of the stomach has absorbed the whole attention of the medical practitioner and patient himself, whilst the real mischief was marching on within the head to a fatal termination. In the foregoing case it is hinted that a similar mistake was fallen into, and in a former number of this Journal* a very instructive instance of the same kind is narrated. The case in question was that of a woman whose prominent symptom was obstinate sickness at stomach which no medicines could arrest, and which at length proved the immediate cause of her death. On dissection the stomach and bowels were found to be perfectly sound but there was a small soft tumour in each posterior lobe of the cerebrum, and a similar mass in a suppurated state in the left hemisphere of the cerebellum. For the particulars of the case we refer to our more detailed account of it, and we think that it forms a good precedent to that of Dr. Ambercrombie.

In the following, the same morbid appearances as those in Dr. A.'s first case are accompanied with a very different train of symptoms. It is a significant hint to those enthusiastic gentlemen who put their undivided trust in morbid anatomy, and swear by the scalpel with more devotion than the Turk by the beard of the Prophet, or the Persian by the sun.

Case 2. "A gentleman, aged 38, during two years before his death had suffered several epileptic attacks, from which however, he had always speedily recovered. On the morning of 27th December 1827, he was

* No. 10, New Series, page 584.

found in bed speechless and paralytic on the right side. He recovered his speech in the course of the day: the palsy continued in the usual manner, and after some time he began to recover a degree of motion of the parts. When he came to Edinburgh about a month after the attack, he had recovered the use of his leg so far as to be able to walk once or twice across his room with much exertion; his arm was improved in a much less degree; his speech was distinct, but his mouth was considerably distorted, and his mind was somewhat impaired. He now consulted Dr. Thompson, and under the usual treatment he was progressively improving, so that at the end of another month he could walk along the streets to a considerable distance, though with a dragging motion of his leg, and could nearly raise his arm to his head. In the evening of 22d February he went to a supper party, and seemed remarkably well; but departed considerably from the abstemious regimen to which he had been previously restricted. About 8 o'clock on the morning of the 23d he was found in bed in a state of complete insensibility, accompanied by severe and general convulsion, which was strongest in the limbs of the right side. The face was much convulsed, the eyes rolling and insensible, the respiration laborious and convulsive. Blood-letting and the other usual means were actively employed without any relief. The convulsion continued unabated in the state now described, when I saw him at eleven, and he died at two.

"*Inspection.*—The brain externally was healthy, except some old adhesion of the membranes near the posterior part of the falx, and very trifling effusion under the arachnoid. The ventricles contained the usual very small quantity of fluid. On the outer side of the left ventricle, and separated from it by a thin partition of healthy cerebral substance, there was a defined portion in a state of complete and diffluent ramollissement. The portion thus affected was about an inch in depth; about half or 3-4ths of an inch in diameter at the upper part, and became gradually narrower as it descended by the side of the ventricle, until it terminated almost in a point. There was considerable softening of part of the medulla oblongata, and the upper part of the spinal cord. No other vestige of disease could be discovered on the most careful examination."

In connexion with these cases of partial softening of the brain we may mention one of a similar character in some respects, which we lately witnessed at St. George's Hospital.

Case 3. Elizabeth Fry, ætatis 40, was admitted into that Institution on the 30th of September last under the care of Dr. Seymour. Her symptoms were pain in the head affecting chiefly the space between the eye-brows and occasionally the occiput—pupils unaffected—sense of smell lost—limbs weaker than they should be, but not hemiplegiac—tongue clean—bowels open—body rather emaciated. The pain in the head was said to have come on five weeks previously after the sudden cessation of the catamenia. Cupping to the back of the neck, the ammoniated tincture of valerian in camphor mixture, the tepid bath, leeches to the forehead, and blisters to the same part and behind the ears, were the measures successively had recourse to. The patient however became worse instead of better, and towards the latter end of October was so weak as to require wine and ammonia. She rallied and on the 26th complained of intense pain between the eye-brows, frequent aberration of intellects, involuntary discharge of fæces; the pulse was regular and natural and there was no hemiplegia. Frictions with the antimonial ointment and opening medicine were prescribed, but at 4 p. m. of the 29th, the patient was discovered in a state of complete coma—loss of power over the muscles of the body—perfect but not loud stertor—dilated pupils—slow struggling pulse, all the symptoms in fact of perfect apoplexy. She was bled to twelve ounces without any other effect than that of increasing the frequency of the pulse, and at 8 p. m. she was bled again to sixteen ounces from the temporal artery. As before, the pulse rose from 50 to 120 after the abstrac-

tion of blood, but no amelioration in the symptoms took place and she died in the course of the night.

Sectio Cadaveris. The body was emaciated, but not to an extreme degree. In the cranium:—the vessels of the pia mater were not unusually loaded with venous blood, nor was there any effusion beneath the arachnoid; a very considerable quantity of clear yellow serum in the lateral ventricles which appeared to be enlarged.

In the right hemisphere of the brain, partly in its anterior, partly in its middle lobe, and stretching across the fissura sylvii was a curious morbid condition of parts. It was a darkish, almost sloughy looking cavity, partly containing recent coagulum but principally filled with a diffluent substance looking like a mixture of softened cerebral matter and effused blood of ancient, or at all events not very late date. Besides these appearances there were one or two nodules the size of marbles, nearly circular, firm, softened, and as it were, putrescent in their centre, and one of them fibrous on section. The cerebral matter in the immediate neighbourhood of the disease was tinged of a darkish colour, apparently from mere contiguity, as it carried no unusual quantity of red blood nor presented any trace of increased organization; there was no pus—no gangrenous odour. Nothing further of any consequence was discovered in the brain, nor was there any disease in the thoracic or abdominal cavities.

The general opinion amongst those who witnessed the examination was, that of the disease being a specimen of fungus hæmatodes of the brain. Whether such opinion be correct or not, the case is undoubtedly one of much interest, and may not unfairly be united with the two recorded by Dr. Abercrombie of partial ramollissement.

XXXIV.

CASES OF CYNANCHE TRACHEALIS.

Dr. Jackson, Assistant Professor of Medicine and Clinical Practice in the University of Pennsylvania, has published three very interesting cases of cynanche trachealis in the American Journal of the Medical Sciences for August last. The deductions which he draws from them appear to us to be so just and of so practical a nature, that we cannot refrain from making our readers acquainted with the substance of the paper.

Case 1. "On the 7th of February, 1829, I was requested to visit, in consultation, E. M. a female child four years of age. She had enjoyed good health, was well nourished, and possessed full embonpoint.

"A week previous this child had been attacked, I was informed by Dr. M. who had attended it, with catarrh and inflammation of the tonsils. Emetics and purgatives had been administered; they had operated favourably; and an apparent amendment had ensued. On the 5th the respiration became stridulous and laboured — venesection ad deliquium was practised with the warm bath; which again produced an abatement of the symptoms. On the morning of the 7th, when I first saw the case, the respiration had again become exceedingly laboured, accompanied with the peculiar sound of croup, stridulous, dry, or unattended with any mucous rattle; cough dry. Examination of the throat showed the tonsils enlarged, a small ulcer on each, the posterior fauces red, but no appearance of membranous exudation, as is often seen in cases of croup commencing in cynanche tonsillaris.

"The treatment directed was sixty leeches to the throat, and warm bath—with three grains of calomel every half hour—after the leeches, a blister to the throat. No improvement was manifested. In the evening twenty drops of hive syrup every hour added to the former treatment, and calomel

reduced to one grain every hour. At the same time muriatic acid was applied to the fauces by means of a brush, as recommended by Bretonneau, in the belief, that, although no exudation was discernible in the fauces, it existed in the larynx, and blocked up the glottis, into which the air was introduced with great difficulty."

Next day there was some improvement, the mucous secretion being established in the fauces and trachea, and the respiration less croupy. Mucous rattle in both lungs—thorax resonant—pulse frequent—cheeks flushed. A blister was applied to each side of the chest, the calomel continued, and at night a pediluvium with poultices to the legs. The little patient became worse during the night, and on exploring the chest it was found that although still resonant on percussion, the respiratory murmur had disappeared. Towards noon of the 9th the child expired suffocated.

Dissection by Dr. Horner, 24 hours after death. "Present Dr. Jackson; weather cold, and no visible putrefaction. On opening the thorax, the lungs did not collapse, though there was no unnatural adhesion. Interlobular emphysema existed throughout the lungs, which was manifested by bubbles of air collected on their surface, in clusters, and in strings or chaplets following the division of its lobuli. One of these strings traversed completely the circumference next to the ribs, of the left inferior lobe. There was also a considerable emphysema around the root of both lungs. Throughout the inferior lobe of each lung there was a high sanguineous congestion, such as exists in the acute stage of peripneumony, and which gave a solidity approaching to the sanguineous hepatization. This congestion was of a greater intensity at and about the root of the lungs. The remaining lobes were of a light spongy texture, and, except for their emphysematous state, seemed sufficiently fit to carry on respiration.

"The emphysema had passed into the anterior and superior mediastinum behind the sternum, and thence below the fascia profunda cervicis, into the root of the neck, up the trachea to the larynx.

"Having taken out all the respiratory organs together, and laid open the trachea and bronchia, there was found a perfect and entire lining of coagulating lymph, extending from the superior margin of the glottis, through the larynx, trachea, and bronchia, into the lungs. This membrane became thicker and thicker in its progress downwards; and could be traced satisfactorily into the secondary branches of the bronchia. It adhered with tenacity to the larynx, and upper half of the trachea; but not so much as to prevent its being pulled off in a state perfectly distinct. In the lower part of the trachea, and in the bronchia, the membrane was so loose that it separated with the greatest facility, forming perfect tubuli.

"The mucous membrane of the larynx, trachea, and bronchia, beneath this lining, was highly injected with blood and inflamed, presenting an appearance, rather rougher than common. In the bronchia it was of a scarlet colour, which increased in intensity the further the bronchia penetrated into the lungs, until the ramifications became so small, as to prevent their being satisfactorily traced. The augmentation of colour was very abrupt, beyond the terminations of the lining membrane of lymph. The ramifications of the bronchia contained a seropurulent fluid mixed with air."

From the absence of croupy symptoms till the 7th day of the disease which began as a simple catarrh, and from the false membrane being firm, thick, perfectly tubular, and nearly detached in the bronchia: whilst it was neither so thick, so readily detached, nor so uniformly diffused in the upper part of the trachea and larynx, Dr. Jackson believes that the inflammation and exudation commenced below and spread upwards. The emphysematous condition of the lungs so plainly indicated by the auscultic symptoms, was due, no doubt, to the obstruction offered to respiration by the croupy exudations. Bronchotomy would have done nothing, save mischief, in such a case.

Case 2. The younger sister of the preceding patient, aged 26 months, of good constitution, became feverish on the 8th of February, the day previous to the other's death. On examination the tonsils were found to be inflamed with slight ulcers on them, the respiration was quick and wheezing. It was put into the warm bath, and two grains of calomel exhibited every hour, but on the 9th the respiration was more difficult and croupy, the child more feverish. Thirty leeches to the throat, sinapisms to the legs, and the continuance of the calomel, with castor oil at 4 P. M. produced some relief to the symptoms. During the night, however, an aggravation took place, and next morning the croupy respiration was more severe, and the fever increased. Examination having now shewn the sister's lungs to have been extensively affected, forty leeches were applied to this child's thorax, and $\frac{1}{3}$th of a grain of antimony in water exhibited every half hour. A free emetic effect ensued, the symptoms became much abated, and at 7 P. M. the respiration in both lungs was found by the stethoscope to be clear and natural. All treatment was omitted, sago water given for nutriment on the 11th, and on the 12th all fever had disappeared. The voice did not perfectly recover for ten days after the disappearance of the disease. The following remarks of Dr. Jackson, though carried in their spirit a little too far, are still a hard hit at our calomel-and-opiumists.

"This case presented the commencement of the same train of symptoms that had conducted the preceding case to a fatal termination. The warm bath, purging, and leeches to the throat, had brought no amelioration to the condition of the patient: the symptoms of croup were unabated. They had failed, in conjunction with emetics and blisters, and the liberal exhibition of calomel, to rescue the sister from the grave. Instructed by the autopsy that had just been made of the body of the sister, the treatment was directed to the prompt reduction of inflammation of the bronchial mucous membrane, and of the lungs. A large number of leeches were applied to the thorax, and to the fossa above the sternum. An immediate amelioration ensued, and the ground, thus won, was maintained by powerful revulsion kept up on the gastric mucous tissue, by the free employment of the tartarised antimony.

"In this case we have another instance, in addition to the thousands furnished already by the practice of this country, that the remedies and the treatment of common inflammation are the best adapted to the cure of croup. What utility is there, then, in the designation of diptheritic, as employed by Bretonneau: of what service is the assumption of specific inflammations, in the pathology of diseases, when the means for the removal of common inflammation, are the most successful and the most appropriate for their treatment? It does not furnish a single fact available in the management of the disease; it does not present any positive idea as to the condition of organ or structure in which consists the disease; or determine a single principle as a guide to the practitioner. It is the persistence in this system, that continues to foster empiricism; to encourage the idle research, so long fruitlessly pursued, of specific remedies, and which are now preferred in croup; and throws our science into the vague and uncertain condition with which it has long been reproached."

Such sentiments, which we believe to be in a great measure just, would never do with the salivation party in this metropolis. With them, man, woman, or child are never safe whilst their teeth are in their heads, and be it high fever or low cachexia—acute rheumatism or slow dropsy—a chronic disturbance of the liver or a violent croup—Allah il Allah, they cry, there is but one medicine, and that is mercury!

Case 3. M. R. a fine lad, six years of age, had enjoyed generally good health, with the exception of a severe attack of pleurisy and gastric inflammation when four years old, from which he recovered with difficulty. On the 5th of June, 1827, after malaise for some days, he was seized with

fever attended by head-ache. He took some magnes. usta and magnes. sulph. at bed time, which opened his bowels. The fever continued on the 6th and he complained of sore throat; bled in the evening to 8 ozs.—On the 7th the fever was less, but he had cough, expectorated fetid, puriform matter, and had epistaxis On the 8th he became suddenly hoarse, and coughed up viscid phlegm of nearly membranous consistency—respiration easy—fauces red—tonsils enlarged, with slight ulceration. Took 8 grs. of cal. —poultice to neck—warm bath. The bowels are freely opened, a profuse perspiration ensued, and the fever was much lessened in the evening. Next day however, all the symptoms were again increased—croupy sound on coughing—ulcers on tonsils extended—posterior fauces covered with a white exudation. Fifty leeches to throat; ʒss. of solut. of ant. tart. every two hours —solution of argent. nit. (gr. xij to ℥j. of water) applied by pencil to fauces; pediluvia.

10th. Croupy respiration—tonsils covered with exudation—no fever. Sinapism followed by blister to throat; cal. gr. ij. every hour; solution of caustic doubly strong applied to fauces; ant. tart. continued. He vomited frequently and was relieved throughout the day, but was awoke with strangling several times during the night. On the 11th the breathing was only stridulous at times. Ipec. gr. 1-4 added to each calomel powder; fifty leeches to throat. The leeching was followed by improvement, and the exudation disappeared from the fauces—he vomited repeatedly during the day, and discharged a viscid mucus mixed with firm lymph. On the 12th, the improvement continued, and he took cal. gr. j. ipec. gr. 1-4 every hour, with a dose of castor oil at 2 P. M. In the evening a febrile exacerbation took place, the respiration was more difficult and wheezing. Sixty leeches round the throat with hive syrup brought relief; he vomited frequently tenacious mucus. During the night he was restless, and on the 13th the respiration was laboured and harsh, the cough constant and severe, the sound that of a loose body in the trachea. Inhalation of vapour of vinegar, dose of calomel raised again to gr. ij. in the hour. From 11 o'clock to 3 the cough was incessant, and the little patient so conscious of some body rising and falling in the windpipe, that he repeatedly attempted to seize it with his fingers. Vomiting was procured by tartarized antimony, and some pieces of membrane discharged with immediate relief. He fell into a sleep from which he was awoke at 8 P. M. by cough; respiration harsh—cough and strangling renewed—more membrane apparently loosened in the trachea, which sneezing from snuff would not dislodge. Vomiting was produced and a little tenacious mucus dislodged with the effect, as before, of procuring relief; the bowels were opened twice during the day. The following passage shews so well the terrible sequel of this interesting case, that we cannot refrain from quoting it entire.

"*14th*—Terrible night; constantly threatened with suffocation, the danger of which became more and more pressing; the glottis appeared to be nearly closed by some mechanical obstruction; auscultation manifested healthy respiratory murmur in both lungs, showing all the difficulty to exist in trachea and larynx. This induced me to propose and urge bronchotomy as affording a chance of safety. At 1, Dr. J R. Barton performed the operation of bronchotomy.—The patient was then at the last gasp, and had ceased to respire about half a minute before it was completed. The operation was performed with Dr. Barton's usual skill, though the patient was convulsed from suffocation during its performance. On the trachea being opened, a gush of fluid took place from the wound, mixed with blood of a venous hue, and carrying with it some detached pieces of membrane; respiration was renewed through the aperture, and the blood discharged became florid. A mass of loosened membrane was seen in the trachea, part of which was removed by forceps introduced into the trachea, and the remainder was driven into the opening by a violent spasmodic effort of the muscles of respiration, in an attempt apparently to cough. It

was immediately seized with the forceps and withdrawn. When unfolded, it exhibited the form of the trachea, its bifurcations and several ramifications of the bronchia; relief was immediate; respiration natural in frequency and force; some wine and water were administered; in half an hour the colour of the lips became roseate; the animal heat was increased to its natural degree, and muscular strength renovated; respiratory murmur distinct and natural in both lungs; was cheerful, attempted to converse, sat up in bed, and favourable anticipations were ndulged. The afternoon was passed in a comfortable state, with occasional sleep; at 8 p. m. pulse was more irritated; skin of febrile heat; respiration laboured; a muco-purulent discharge commenced from the aperture in the trachea; these symptoms continued to advance, the discharge became more viscid, and so abundant, it was difficult to keep the opening free; the respiration was more and more laborious; mucous ronchi were heard in every part of the chest; the sense of distress and suffocation augmented; relieved by coma, and finally death at 5 a. m. of the 15th, seventeen hours after the operation."

Dissection thirteen hours after death.—Body thin, limbs slightly rigid.

"*Abdomen.* The stomach was distended; contained a quantity of clear fluid, principally the drinks he had taken previous to death; a thick, white tenacious mucus, in considerable quantity, adhered to the lining or mucous membrane; in cardiac extremity this membrane was of brown colour; of whitish colour in other portions; thickness and consistency of the membrane no ways altered.

"The intestinal tube appeared in natural condition throughout, as respected colour, consistency and thickness; secretions natural. Spleen and liver in normal state.

"*Thorax.* Right lung. The pleural surfaces adhered firmly in every part; this condition had resulted from the former severe attack of gastro-pleuritis. The bronchial tubes were filled with a serous frothy fluid which discharged from them when divided. Left lung. No pleural adhesions; collapsed; was crepitating; bronchial tubes contained frothy mucus in small quantities.

"*Trachea and larynx.* The interior of the larynx was completely incrusted over, with membraniform exudation; it lined the internal face of the epiglottis; the external was free of it; the rima glottidis was nearly closed by it. The ventricles of Morgagni, the ligaments &c. were no longer apparent from the thickness of the membranous layer, spread over the interior of the larynx. This layer adhered firmly to the mucous membrane, but its surface was irregular, appearing as though pieces had been detached.

"The membraniform exudation extended through the trachea, and penetrated the bronchia, below its ramification, but did not enter the smaller divisions. At the ramification, the calibre of the bronchial tube was so much diminished as merely to admit a small quill. In the trachea, the exudation was closely adherent to the mucous membrane; in the bronchia it was detached and tapered off to a point. It could be separated, in the thickest portions, into layers, appearing to have been formed by successive exudations.

"The lower portion of the trachea and bronchia contained a fluid of the consistency and possessing the colour of cream; the tonsils and the posterior fauces were covered with a copious, thick, viscid mucus, strongly resembling albumen. The fluid of the trachea, I suspect came from this source, and the alteration of its colour, proceeded from its mixture with the air. I observed before death, that every act of inspiration produced a singular rattling sound. The copious secretion from the fauces, could not be expectorated, in consequence of the opening into the trachea, which destroyed the phenomenon of coughing, and it was drawn into the trachea by the effort of inspiration. Hence the windpipe was filled with it, respiration embarrassed, and suffocation ensued from its accumulation in the trachea and bronchia, with that of the bronchial secretions, in the lungs, from the impossibility of expectorating them by the loss of the power of coughing.

The preceding cases appear to our author to justify the following conclusions:—

1st That inflammation of the tonsils is a frequent precursor to croup in children; and that it ought consequently always, in them, to be attentively watched, and should be treated very actively by the means best adapted to reduce inflammation.

"2d. That the membranous exudation may commence in the lower part of the trachea and the bronchia, extending upwards, and does not invariably arise in the fauces or larynx, and proceed downwards.

"3d. That the most prompt and decisive remedy for sanguine inflammation—that is, sanguineous depletion—is the only certain remedy, and should be resorted to in the first periods of the disease, so as to precede the membranous exudation.

"4th. That the membranous exudation having been once produced to any extent, little expectation of a recovery is to be entertained. When this result does occur, it is to be regarded as fortuitous, depending on some extraordinary circumstance, and which cannot be calculated as a probable event.

"5th. That when the membranous exudation has been thrown out in the larynx, trachea, and bronchia, the application of muriatic acid to the fauces, so highly extolled by Bretonneau, and of nitrate of silver, recommended by Dr. Mackenzie, from the local and limited impression they must necessarily make, can promise no beneficial operation—their influence cannot be extended to the surfaces from which the exudation takes place. This practice can be of utility only in rare cases, where the difficulty arises from an obstruction limited to the glottis and fauces.

"6th. That laryngotomy, or bronchotomy, is a useless operation, when the membranous exudation has actually occurred, and and extends, as it mostly does, to the trachea and bronchia; or, when the inflammatory irritation of the respiratory mucous membrane is not subdued, and a free secretion from it is produced. The impossibility of coughing after the operation, prevents expectoration, the fluids accumulate in the trachea, bronchia, and bronchial ramifications in the lung, causing, finally, suffocation. The only case in which the operation promises success, is an obstruction confined entirely to the glottis, without disease prevailing to any extent in the respiratory mucous membrane."

"The practical nature of the foregoing cases and their intrinsic value will form a sufficient apology for the lengthened notice we have given them. We believe that such articles as these are worth a thousand of the common flim-flams, termed original, of the day; in which it is the author's object to shew that he has made some wonderful discovery, the power of curing tetanus, for instance, by epsom salts, or the like. If such be physic, then, like Macbeth—We'll have none of it!

XXXV.

MEDULLARY SARCOMA OF THE STOMACH AND PHARYNX.*

The obscurity of abdominal tumours and diseases is proverbial. Every day an enlarged liver is mistaken for an ovary, or diseased ovary for a large liver—ascites and ovarian dropsy are constantly confounded—morbid growths of the kidney are overlooked—affections of the spleen discovered on the dissecting table—and malignant diseases of the stomach either never found out at all, or not till they become so marked and unequivocal that none who have eyes in their head can neglect to observe them. These are not hypothetical blunders, or mistakes got up for the sake of an antithesis, for we have ourselves seen examples of each and all within the last year and a half. Such being the case we cannot pay too

* Monro on the Morbid Anatomy of the Gullet, Stomach, and intestines. 2d. Edition.

much attention to well-authenticated cases of organic disease of the abdominal viscera, at least if it is our object to avoid cutting a sorry figure in the eyes of patients and well informed practitioners.

Fungus hæmatodes or medullary sarcoma of the stomach is, we think, more obscure in its symptoms and march than scirrhus of that organ. Dr. Monro, who has lately published the second edition of his valuable work on the Diseases of the Intestinal Canal, informs us in his chapter on the subject, that he has met with several instances of this disease. In two there were tumours of a somewhat similar description in the substance, and also on the surface of the liver, which was very much enlarged; the lymphatic glands in the vicinity were also considerably enlarged and indurated. If we might judge from our own experience we would be inclined to say that the liver was of all the internal organs most frequently affected secondarily with fungus hæmatodes But this by the way. Our author subjoins the history of those cases which are contained in the Anatomical Museum of the University of Edinburgh.

Case 1. "In this there is at the cardiac extremity of the stomach, an extensive lobulated tumour of a medullo-sarcomatus nature, the lobes of which are covered with a delicate mucous membrane. In the right lobe of the liver there are two *scirrhous* tubercles. The left lobe adheres to the cardiac extremity of the stomach; and at the attached extremity, there is a tumour, the centre of which is occupied by a sloughy, fungoid mass, extending through an aperture into the stomach. Symptoms: Countenance exsanguine, tenderness in epigastrium, vomiting, alternate constipation and diarrhœa, and emaciation. Patient a female, aged forty-six."

If there be no looseness in the foregoing statement and the liver really presented true scirrhous tubercles whilst the stomach was affected with medullary sarcoma, the case is possessed of additional interest as showing the connexion between the two forms of malignant disease. We have seen a preparation in the possession of Mr. Brodie showing the co-existence of cauliflower excrescence of the uterus, scirrhus, and fungus hæmatodes in the same individual, and it really is not unfrequent to find tumours undistinguishably resembling the fleshy tubercle of the uterus along with fungus hæmatodes of another part. Many able surgeons are inclined at the present day to consider scirrhus and fungus as merely grades of the same disease.

Case 2. "At the cardic extremity of the stomach there is a large medullary fungoid tumour, of a light straw colour, covered by a delicate vascular membrane. The serous membrane of the diaphragm was much thickened, and intimately adhered to the left lobe of the liver, and to the stomach. The patient, a man of seventy-three years of age, had a sense of constriction in the throat, combined with difficult deglutition, which was relieved by the use of the probang. He also had cough, constipation, latterally diarrhœa, and became much emaciated.

Case 3. A man, ætatis 44, complains of pain in the right hypochondriac and epigastric regions, much increased by pressure which produces nausea and retching—considerable hardness and swelling in the upper part of the abdomen, tension, and elasticity in the lower—immediately under the false ribs of the right side, two hard tumours distinctly felt, each apparently about the size and shape of a walnut—appetite impaired—breathing difficult—cough — headache sometimes severe—much thirst—pulse natural—tongue white—bowels slow—urine scanty. Says that about five weeks ago he felt frequent sharp shooting pains in the epigastrium, which were followed by the gradual enlargement of the parts.

Opening medicine, a sinapism to the epigastrium, and leeches were applied with relief to the pain, but on the next night the feet and ankles became œdematous. The emaciation increased, the pain returned with severity, the lower extremities became more swollen, fluctuation was evident in

the abdomen, and the patient died on the eighteenth day.

"On opening the abdomen, the liver appeared much increased in size. A number of large tuberculated tumours were found on its surface. Some of these, when cut into, were of a hard cheesy consistence, while others, more advanced, were in a state of suppuration. The abdomen contained about lb. xv. of serum."

It is to be remarked that although the patient in this case complained of nausea and retching, it was after pressure on the epigastrium, and not, if we may trust the silence of the reporter, after eating or drinking. This, of course, is not the ordinary character of malignant disease of the stomach itself, and so far may assist in diagnosis. Besides there was dropsy, another concomitant of hepatic, as distinguished from gastric disease.

"It may not be improper to add, that medullary sarcoma of the stomach is not always similar to the medullary matter of the brain, being sometimes more of a yellow, reddish or brown colour, and also that there is some variety as to the consistence of different parts of the tumour; the consistence towards the circumference being harder than that in the centre of the tumour, which may perhaps be owing to an imperfect suppuration going on in that part of the swelling, as, according to Mr. ABERNETHY, happens when the primary disease is seated in the testicle.

"There is also a coincidence between the external medullary sarcoma, and the internal, which grows from the mucous membrane; in respect that in both there is swelling and enlargement of the glands connected with the absorbent system.

"In one of the specimens in the Museum, the mucous membrane of the stomach is ulcerated, and there were melanotic depositions on it; and there is a large irregular opening in the stomach communicating with the centre of a medullo-sarcomatous tumour of considerable size, which occupied the whole of the smaller curvature of the stomach.

"Medullo-sarcomatous tumours, of a harder description, sometimes grow from the mucous membranes. I have in my possession a specimen of this description, which grew from the pharynx, and proved fatal, by obstructing respiration and deglutition."

The following interesting case was received by Dr. Monro from his late pupil, Dr. George Wylie, of Paisley. It is rather out of place in a section professedly devoted to fungus hæmatodes of the *stomach*, but n'importe. Valuable facts are still valuable, although they may owe nothing to the arrangement and method of their narrator.

Case. Roseanne Grey, æt. 11, of ruddy complexion, with dark hair and eyes, was much exposed to cold during the earlier part of the spring of 1810, whilst sitting at work, and constantly complained of a chilliness. About the end of March she complained of a pain in the head, and especially in the left ear, accompanied by giddiness, which were much increased by exercise. She became weak, and of unhealthy appearance, and for three weeks in April was confined to bed. During the summer months, she was now and then so free from her complaints, for a few days at a time, as to be able to stir abroad. About the middle of August her relations first observed that she spoke less distinctly.

"About the end of September I first saw her. She complained of pain in the head and left ear, and giddiness; her deglutition and speech were impaired; the mouth was a little distorted to the right; she breathed none through the left nostril; heard less distinctly with the left ear; and the eye of that side was so full that the eyelids could not completely cover it, yet she saw equally well with them both. She was much emaciated; had little appetite, and was costive; pulse small, frequent, and weak. On looking into the mouth, a tumour was observed to be situated partly behind, and to the inside, of the backmost grinder on the left side of the upper jaw; its base extended to the gum before, and to the velum palati behind, stretching to the right as far as the ss-

ture which joins the palate bones. It was about the size of a small nutmeg, and had a groove or depression along its middle from before backward. When pressed it was slightly elastic, and had so much the appearance of an abscess as to be repeatedly mistaken for one. It was a little moveable; and when moved gave a sensation similar to that felt from moving a small hard steatoma."

Laxatives were prescribed with benefit to the general health, and Dr. Wylie saw no more of the patient till the 13th of November, when the tumour had increased rapidly, was as large as a pippin, immoveable, and filling the fauces so completely that liquids were swallowed with great difficulty.

"It was connected with the gum of the backmost grinders and the tonsil of both sides, and completely hid the velum and uvula. It was larger on the left side, and, from its great projection, depressed the root of the tongue, so as to give the appearance externally of a tumour above the pomum Adami. By depressing the tongue with a spatula, the uvula was seen to be pushed toward the right, and depending from the posterior part of the tumour. The right half of the tumour was firm, the larger or left half was a little elastic.

"On the 16th, a small oblong superficial ulcer appeared on the fore part of the tumour; a second was in a few days formed by the pressure of the under molaris of the left side; neither of these gave any pain, and they discharged very little; the first healed in a short time. More than the usual quantity of saliva was secreted; and, from the difficulty of deglutition, it almost constantly ran from the mouth.

"On the 20th the tumour was observed to be larger; and the patient breathed and swallowed with extreme difficulty. Inspiration became more difficult in the horizontal posture, especially during sleep, and she was frequently awaked suddenly by it, and had recourse to the semi-erect posture, like one in a paroxysm of asthma. In a consultation, it was agreed that exptirpation should be speedily resorted to, for the following reasons: The tumour, though fixed, was at first moveable; from its rapid increase the patient must in a short time have died from inanition or strangulation; the operation would at the least produce a temporary alleviation: And a case occurred lately, in which a similar tumour was removed with success.

"21st. Betwixt the hours of one and two p. m. the tumour was removed by incision, after being freed from its attachments to the gum and tonsil on the right, and the cheek, gum, and tonsil on the left side. The velum and uvula were removed along with it, which exposed to view a tumour nearly as large as the first; they were connected at their bases, and seemed to be only one tumour with two lobes. This posterior lobe hung, from its attachment behind the velum, down into the pharynx. The effusion of blood from the wound was trifling; the pulse 120, and weak. Feeling weak and much exhausted, she was put to bed, with the intention of waiting till she became stronger before any thing further should be attempted.

"The tumour being cut into, was found to be of the sarcomatous kind; very like gristly fat in texture, but of a rather whiter colour."

In the course of about an hour hæmorrhage occurred to a considerable amount but was arrested. On the two next days she vomited dark grumous matters, the result, no doubt, of the blood which she had swallowed. With regard to the wound it went on so well that on the 29th it was clean and free from fetor, and the patient was able to walk about the house without support. On the 3d of December, however, the face, especially the left side, was much swelled and occasionally flushed, the tumour behind the velum had increased much, and externally a small, conical tumour, hard and immoveable, was observed projecting below the mastoid process of the left temporal bone. She began to hear less distinctly, was frequently seized with faintness, and was confined to bed. After a few days the tumours grew rapidly, respiration and deglutition became proportionably more difficult, she

dozed constantly unless when tormented with pain, but awoke almost suffocated, and on the 27th of January, 1811, death put a period to the poor young creature's sufferings.

"*Dissection.*—By sawing through the inferior maxilla at the middle, and turning back the left half, after dividing its muscular connexions, the tumour was fully exposed to view. It now appeared to fill the whole of the throat and pharynx. Its base was attached to the palatal plates of the palate bones, to the left of the pterygoid process of the sphenoid, and the point of the petrous portion of the temporal bone, where the eustachian tube issues. Its left side grew to the cheek, the gum, and tonsils, and sent a sharp process to occupy the space betwixt the angle of the jaw and the mastoid process. Its posterior surface was connected by cellular membrane, to the back of the pharynx. As it passed the nostrils, it sent a process into each; that into the left was bloody. Upon opening the cranium, the base of the tumour was observed to have obliterated the extremity of the os petrosum and corresponding portion of the sphenoid bone, causing the dura mater over the cavernous sinus to be elevated as high as the clinoid processes. The left nervus trigeminus could could not be traced after it pierced the dura mater. The hole which the tumour had made in the bones was roundish, with sharp and rough edges; and was large enough to admit the point of the forefinger. The tumour seemed to have no connexion with the orbit. About an ounce of water was found in the ventricles of the brain.

"The tumour, at its attachments, was firm and almost cartilaginous; but its apex, which rested on the gullet, was soft and friable. The processes which were in the nostrils were as soft as brain."

This case exemplifies well the bad effects of the operation for fungus hæmatodes after ulceration has commenced. A quicker growth, more destructive ravages, and more extensive implication of other organs appear to be the result of an operation under such circumstances. It seems as if the system deeply resented the interference of art and the sequel forms the most apt illustration of that saying—God never made his work for man to mend!

To revert more particularly to the present case we regret that no mention is made of the state of other parts, but that all the dissector's attention has been taken up in describing the local mischief. One word with regard to the operation performed;—no effectual precautions would appear to have been taken to guard against hæmorrhage, which *was* alarming and *might* have been fatal. Surgeons, we fear, too generally imagine that provided the immediate bleeding is stopped, all that remains is to wash their hands and faces, and put the patient into bed. They have been led of late years to consider it unnecessary to tie any vessel short of the aorta, and at length, we suppose, they will tie none at all. The best surgeon, in our humble opinion, is he who provides not only for what is present, but for what may come; who sits down leisurely to secure those vessels which will probably bleed when the patient is warm in bed, or flushed with the fever which must certainly succeed. In removing tumours about the jaw or the fauces, the cautery, actual or potential, is of great importance, as it acts not only in providing against hæmorrhage, but in completing or aiding the operation of the knife.

XXXVI.

LITHOTRITY AND LITHOTOMY.

Every body knows, or at all events ought to know, that now and then the public requires something new to tickle its jaded appetite, and enable it to get through its ordinary fare without nausea and indigestion. What in the world could the Londoners do in the autumnal months, if they had not a fire-eater or the Grand Turk and Count Diebitsch to astonish and confound them? They would die in their smoke to a certainty. Like our neighbours we (that is to say doctors) must have our nine day's wonder,

and so that it is strange and incredible, it does not much signify what the matter may be. The all engrossing subject, the *magnifique chose* of the present day, is lithotrity beyond a question. The professors of this great discovery are at present most busily occupied in *boring* their patients, the public, and each other on both sides of the Straits of Dover. This is as it should be, and provided the gentlemen themselves are satisfied, most assuredly we have no reason to be otherwise.

Whenever any thing new is promulgated whether it be a patent corkscrew or a scientific principle, two circumstances are always observed. First, the corkscrew or the principle, be it which it may, is announced as infinitely superior to all other corkscrews or principles; and secondly a host of claimants start up and assert that it is no discovery at all, but that *they* have known the identical thing for God knows how many years. This mode of proceeding is so constant on these occasions that we are not a whit surprised at remarking it at present in the case of lithotrity. The enthusiasts for the operation, not content with the merits it really possesses, must exalt it above any any thing short of the philosopher's stone, and one of these visionaries asserted in a thesis which he sustained at Paris—"that if a portion of the mucous membrane of the bladder were seized by the instrument and torn away it would be a very desirable and fortunate circumstance, because of the local bleeding which would follow."! M. Civiale even maintains that lithotrity, so far from being likely to injure the bladder, is on the contrary calculated to improve its condition when diseased, (détérioré)! Such opinions as these requiring to be taken cum grano salis, it would be a very desirable thing to obtain an impartial estimate of the advantages and disadvantags of the operation. But where shall we get that unbiassed judgment? There's the rub. We have seen, and we might know it if we had not seen it, that the discoverers or adepts are not unprejudiced, and those who are neither discoverers nor adepts cannot of course form an accurate opinion. The only real arbitrator in these matters is Time, which determines pretty fairly the value of all things.

But as Time is like the Chancellor a tardy sort of judge, who won't suit your peppery disputants of 1829, it becomes necessary to anticipate the decision as far as one can, even at the risk of having the rule discharged at last with costs. Be not alarmed Messrs. Leroy d'Etiolle, Civiale, and Heurteloup, *we* are not about to decide upon your claims, nor to trim the balance between lithrotrity and lithotomy. We know too well—

> The dangers that environ
> The man who meddles with cold iron,

to settle the merits of the gorget and the pince à trois branches. We merely intend to glance at a work lately published *in* Paris by a M. Bancal, a physician of Bordeuax, and a lithotritist. It is entitled a "Practical Manual of this Operation," and is written in the form of letters to a young physician. Our object is not to analyse the work but merely to extract one or two passages from it, in order to place the actual bearings of the question on something like an approximation to the truth. A word or two may be said with regard to the introduction of the straight instrument into the bladder. M. Bancal divides it into three stages;—in the first, the end of the instrument is carried as far as the bulb, the penis being held vertically; in the second, the penis and the instrument are slightly inclined downwards, and the beak of the latter traverses the membranous part of the urethra; in the third, the instrument and penis are depressed still more towards the thighs, and the blunt point of the former slips through the prostatic portion of the canal, mounting over the eminence formed by the third lobe of the prostate gland. So much for the introduction of the straight instrument, and we have no intention of detailing the steps of the process of drilling, as so many descriptions of that are already before the profession.

The tenth letter is occupied with the question of lithotrity for calculi in the female bladder, and a very practical one it is. M. Bancal has tried it in three cases,

and experienced the *greatest difficulty* in each, a difficulty "which has also been felt by other persons." We have reason to know that such is the fact, and refer our readers to a case related by Mr. James Wilson of Glasgow, and noticed in the Periscope of the present number. M. Bancal speculates on the why and wherefore, but without any great success. He imagines that the principal cause is the low situation of the neck of the bladder, at its very *bas-fond*, in consequence of which the stone always lodges on the part, and is applied on the opening into the urethra. This is ingenious, but as a contemporary French critic well observes, the elevation of the pelvis ought to obviate such a difficulty, which however it does not. The critic to whom we allude, a writer in the Hebdomadaire evidently well acquainted with his subject, proposes another conjecture: viz. that the great transverse extent of the female bladder, and the depression of its *bas-fond* on the sides of the vagina are the real obstacles to the seizure of a stone. We are inclined to think that this idea is correct, and that the true solution of the problem will be found in the great relative capacity of the organ, which capacity must, of course, be chiefly in the transverse diameter. Whatever may be the cause it is certain that lithotrity is not well adapted for the female, and the present operation on that sex is not only more esily but more expeditiously performed. This is the important point, and all parties appear to be agreed upon it.

The last and most complex question that remains is the comparative merit of lithotrity and lithotomy in the male. It is very clear that to settle this point we are not to take for granted the assertions of the ultra advocates of either operation. Raw, for instance, as arrant a knave as ever juggled at a country fair, asserts that he cut 1500 persons for the stone, without having lost a single individual. On the other hand, M. Bancal declares in his preface that lithotrity is of no more consequence than the introduction of a catheter, and says in express terms that it is "always innocent." We shall see in a few minutes the innocence of his pet. When we set aside these extravagant pretensions, we have still another impediment to encounter in arriving at the truth. The lithotritists have notoriously *picked* their cases; that is, they have selected for their operation persons affected with small single stones, and free from any other disease of the bladder, kidney or urethra; persons in whom, as the intelligent writer in the Hebdomadaire observes, the lateral operation of lithotomy would have offered the greatest chance of success. We know that this has been in some degree denied, but out of their own mouths will we judge the lithotritists:—"Laissons aux lithotomistes," says M. Bancal in his sixth letter, "*le soin de porter l'instrument tranchant dans les vessies malades.*" This good natured offer will no doubt be duly appreciated by the public and the lithotomistes. Under these circumstances it is obvious how impossible it is at present to decide on the substantive value of lithotrity, but the following table of calculous patients who presented themselves to M. Bancal, will perhaps dispel some of those airy castles erected in the brains of our cockney doctors, respecting the universal "innocence" of the operation.

Eleven patients with stone applied to M. Bancal. Of these, five were subjected to the operation of lithotrity.

Two of the five were cured:—M Angault and M. Dupuis. The other three died of inflammation of the bladder; two after the operation:—L'Eglise and Eusebi, a Spaniard; one during the process of dilating the urethra preparatory to lithotrity:—M. Figuier.

Two patients supported some attempts at lithotrity, and then would submit to it no longer:—M. S. and M. Orignac.

The remainng four of the eleven were *lithotomized* with success;—one by M. Viguerie of Thoulouse (M. Rollan); three by M. Bancal himself;—M. Delerm, M. B. Hugot and Anna, a sailor, in whom the stone was sacculated and could not be extracted.

The foregoing table is any thing but favourable to lithotrity, two only out of seven

in whom it was performed, being cured;—three dying with inflammation of the bladder;—and two refusing to submit to its performance after one or two trials. We cannot but praise the candour with which the results are thus made public by M. Bancal, and we sincerely wish that every medical writer would evince the same. We should not then be inundated with the lies (why mince the matter?) that mislead us at every step in physic. We do not put forward these unfavourable cases as shewing the actual value of the new operation, on the contrary, we are disposed to take its part against the operator, M. Bancal, and consider them as much more unfortunate than usual. At the same time it is an act of justice, and, on our parts an act of duty, to make public such facts of importance as these, and destroy the ridiculous impression on the part of many, that no danger whatever can possibly attach to lithotrity.

CLINICAL REVIEW.

XXXVII.

WESTMINSTER HOSPITAL.

1. FATAL INJURY OF THE KNEE-JOINT.

George Budd, æt. 52, admitted August 24th 1829, under Sir Anthony Carlisle; states that ten days ago he was shaping a pole with an axe, and missing one of his strokes, he struck his right knee on the inside—it did not bleed much, and he bound it up and was carried home. The next morning he had medical advice, and his knee was strapped and bandaged; he was not seen again until two days after, in the mean time he had suffered great pain and his knee and leg became red and swelled. Poultices were then applied, and continued until he was admitted yesterday. Thirty leeches are ordered to be applied; fomentations and the following mixture:

℞. Infus. sennæ, ... ℥viij.
Magnes. sulph. . . ℥j.
Potassæ supertrart. . 3iij.
Sodæ carb. . . . . 3j.

Ft. mist. et. capt. cochl. ij. 4tis horis.

Aug. 26th. On examining the knee this morning it is found to be considerably swelled, red and hot, and he complains of great pain in it. His tongue is pale and slightly furred—bowels not opened since yesterday morning. On pressure a considerable quantity of serous fluid with flakes of white matter escaped from the wound. Skin moist and cool—pulse 96 in the minute, small and thready.

℞. Hydr. submur. gr. v.
Pulv. jalapæ, ℥ss.

Ft. pulv. st. sumend.—Fomentations of poppy-heads, &c. to be continued.

Aug. 27th. The fomentations have been constantly applied—he does not complain of so much pain, and his knee seems altogether in a quieter state As he has been lying so as to allow the discharge to escape by the wound, there was not much observed flowing out this morning. Pulse full and 90 in the minute—bowels opened once yesterday—tongue pale. Rep. pulv. purg.

Aug. 28th. The heat and pain in the knee are diminished; there appears also to be less discharge. Fomentations to be continued. Pulse quick, not very strong.

Aug. 29th. Pulse 96, hard and rather wiry—tongue clean—the knee is apparently much the same. He says he suffers considerable less pain than he did two or three days back. Bowels open.

Sept. 10th. The patient has been going on very slowly but progressively improving, the knee has become quieter—the discharge less, and the wound healed up to a mere point, from which a very small quantity of discharge oozes. His bowels are open, he complains that he is weak, suffers but little pain, and that is chiefly confined to the ham.

Sept. 16th. His wife insists on taking him out—he is much the same.

Sept. 30th. Information was brought that he died two days ago.

II. SYMPATHETIC BUBO, ATTENDED WITH A PECULIAR ERUPTION.

Samuel Stokes, æt. fifteen, admitted under Mr. Guthrie, October 7th, 1829. A fortnight previous to his admission he was lifting a heavy cask of beer and strained himself greatly—he rested the edge on the right groin. The next day he felt the effects of the straining in his back, and whenever he attempted to walk had great pain in his right groin. He went to bed, and three days afterwards he observed a swelling in his right groin. He was bled, and had some medicine; and the principal effects of his exertion in a short period went off, but the swelling still remained increased in size and hardness.

This patient also suffers from an affection of the heart, which has existed since childhood—its palpitations are so strong that he says he feels it "ticking" in his neck—he has great oppression at the chest, with difficulty of breathing. The action of the heart may be felt very distinctly all over the chest and along the spine. He has often great difficulty in getting up stairs.

℞. Hyd. submur. . gr. iij.
Pulv. jalapæ, c. 3ss.
Ft. pulv. st. sumendus. Poultice to the tumour.

10th. Yesterday evening he observed an eruption on his skin, and this morning he is covered with a copper-coloured eruption. Tongue pale, skin hot and dry. Bowels not very open.

℞. Liq. ammon. acet. d. ℥iij.
Liq. ant. tart. . . . 3iij.
Mist. camph. . . . ℥v.
M. et cap. cochl. ij. 4tis horis.

11th. He is better to-day—less feverish—the eruption is rather stronger in colour—the swelling in his groin is larger and softer.

12th. He continues better—eruption the same.

14th. The fever has left him—the eruption is fading.

17th. The spots have gradually assumed a fainter tint—they are still of a well-defined copper colour.

19th. Pulse 100, moderately strong, action of the heart excessive. The eruption has disappeared, leaving copper-coloured stains. Tongue clean—bowels open. He is free from fever, but complains of tightness across his chest. The tumour in the groin has been rubbed with the potassa fusa. Acid. hydrocyanici, ♏j. ter in die sumend.

25th. The abscess in the groin now presents a clean ulcerated surface—his chest is better, and his general health improved.

27th. He complains of pain in his chest. Hirudines xviij. applicand.

30th. Pain still continues. Rep. Hirudines.

31st. He is better this morning—pulse 100, soft—skin hot and rather dry—tongue clean—bowels open. Acid. hydrocyan. ♏ij. 4tis horis, sumend.

Nov. 8th. The ulcer in the groin is healing—the eruption and stains have entirely disappeared.

III. DISEASED TESTICLE.

William Cox, æt. 53, admitted June 20th, 1829, under Mr. Guthrie. States that about seven years ago, he thinks, in consequence of a strain, he had the right testicle enlarged. It appeared much inflamed, greatly increased in size, and so painful that he could not stand upright. He had medical assistance—some veins were opened on the scrotum, and he thinks he lost about a pint of blood, and he felt relieved by it. After being confined to bed for six weeks with cold lotion to the part, &c. he was able to get up and go to his work. He has worn a suspensatory bandage ever since. The testicle returned to its natural size, and he felt no inconvenience from it until February last, when it again became swelled and painful without his being able to assign any probable cause. This attack confined him to bed for six weeks, having cold lotions, medicine, &c.—he then proceeded to work for three weeks, when he was again obliged to return to his work—he had cold lotion applied for about a month, and after this a liniment. He remained for about eight weeks unable to do any work, and was then admitted into this hospital.

On examining him fluid was felt, which Mr. Guthrie let out by an incision with a lancet. The testicle was then more dis-

tinctly perceived to be hard, elongated, and knotty—but without much pain.

This patient is not of very strong constitution, but generally enjoying good health, except during the last five years that he has been much troubled with rheumatism in all his joints. He never had gonorrhœa but once, about 15 years ago, which was slight and speedily cured—he has never had syphilis and lived temperately, not much addicted to excess of any kind.

He was ordered a few days after his admission the following powder:—

℞. Hyd. submur. gr. iij.
Pul. conii, ℈j.

M. et divide in partes vj. et cap. j. ter in die.—Conii folia pro cataplasm.

July 3d. He had the poultice of fresh hemlock leaves mixed with sufficient of linseed meal to make it of good poultice consistence applied yesterday—to continue.

July 15th. His mouth has become sore—the testicle is diminished in size, much smoother. Ten grains of pulv. conii to be added to the powders. Full diet.

July 24th Tincture of iodine is ordered to be applied to the scrotum until it produces blistering. Powders discontinued—he has evidently derived much benefit from the poultices.

October 15th. He has had the testicle blistered in this manner five times, allowing an interval of some days to elapse between each; he has also had a large sound passed twice a week to excite a little irritation. The testicle is now very much diminished in size, perfectly smooth, and quite free from pain.

Oct. 23. Blister repeated.

29th. There is evidently fluid within the tunica vaginalis, which Mr. Guthrie proposes letting out. The testicle does not appear much above the natural size.

Nov. 8th. Mr. Guthrie made a puncture with the lancet, and about an ounce and a half of fluid escaped The testicle was then examined, and ascertained to be smooth, and not above the natural size. He suffers no pain.

XXXVIII.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

Mr. Guthrie has continued the trial of the oleum terebinthinæ in several cases of internal inflammation of the eye, in some cases of amaurosis, and in other complaints of an anomalous nature. We have selected the four following of internal inflammation.

Case 1. Daniel Kelly, ætatis 26, admitted Sept. 1st, 1829, with iritis of the right eye.

Two years ago the left eye was affected with the same disease, for which he was under the care of Mr. Guthrie, and was cured by calomel. The inflammation of the right eye commenced four days ago with slight pains in the orbit, which he has not felt for the last two days: the iris is discoloured, and the pupil irregular; the sclerotic vessels are enlarged forming a zone of a pink colour round the circumference of the cornea, the vessels of the conjunctiva are also enlarged.

2nd, The inflammation is much increased, the iris being of a darker colour, and the pupil more irregular; the zone round the cornea is much more distinct and of a darker colour, he complains of the tears being very hot.

Ol. terebinth. ʒj. ter quotidie.

3d, The pupil is contracted and acts very sluggishly; the conjunctiva more vascular, the tears continue hot, and he complains of slight pain in the eye on exposure to light; he voids his water more frequently and has a little scalding.

Cont. ol. terebinth. ʒj. ter die.

5th, He suffered great pain in the eye last night. The iris is more discolored, and the sclerotic inflammation augmented; the vessels of the conjunctiva are less injected.

App. Cucurbit. cum ferro ad tempor. ad ℥x.
Cont. ol. terebinth. ʒiss. ter die.

8th, The sclerotica less inflamed, and the conjunctival inflammation quite gone; the iris of a lighter colour; the pupil remains contracted and irregular: he has not taken any medicine since the 6th. Ordered

to leave off taking the ol. terebinth. and to have the guttæ belladonnæ dropped into the eye.

15th, The sclerotic inflammation almost gone, and the pupil nearly circular, and more dilated.

App. guttæ belladonnæ.

17th, The pupil is now quite regular, and the iris is of the same color as that of the other eye, and the redness of the sclerotica has quite disappeared.

Discharged cured.

Case kept by Mr. Weight.

Case 2. Mary Barry, æt. 40, admitted August 28th, 1829. About a fortnight ago was attacked by severe darting pains in the left eye-ball, accompanied by inflammation which she attributes to cold. She was cupped to ℥xiij. the next week and purged. The iris is now slightly discolored; pupil fixed and irregular; sclerotica and conjunctiva a good deal inflamed; cornea rather muddy; she complains of a feeling as if sand were between the eye-lid and the ball of the eye.

Cap. ol. terebinth. 3j. ter die.

29th, The sclerotic and conjunctival inflammation is considerably diminished. The first dose of turpentine made her very sick. Rep.

Sept. 3rd, Sclerotic inflammation nearly gone; pupil more regular; the cornea is still muddy, and she says that her sight is more dim. Complains of a little strangury.

Pulv. jalap, c. 3j.

Infus. lini. p. p. v.

Cont. ol. terebinth.

10th, Has not taken any turpentine the last three days. She is however much better—pupil contracts and dilates and is almost regular; sight improved—bowels confined.

Pulv. jalap, c. 3j. o. n.

Gutt. belladonnæ.

17th, All appearances of inflammation are gone, and she only complains of a little dimness of sight.

Gutt. belladonnæ.

Sept. 24th, Has returned to-day suffering under a fresh attack of the disease. Attributes it to her getting wet on the 19th. The iris is very irregular, darker in color than natural and immoveable; cornea muddy, sclerotica and conjunctiva slightly inflamed; complains of darting pains in the eye.

Ol. terebinth. 3j. ter die.

Oct. 6th. Has taken the medicine pretty regularly since the 24th, and excepting a little dimness of vision she is quite well.

Gutt. belladonnæ.

Case kept by Mr. James.

Case 3. John Lucas, aged 20, admitted Sept. 22d, having iritis of both eyes. Inflammation attacked the right eye a fortnight ago, and the left three days after. He complains now of great pain across his forehead and intolerance of light, his sight he says is very dim, especially of the left eye. He applied a blister behind his left ear three days back, but without any relief. The conjunctiva of both eyes is very much inflamed so that the state of the sclerotica cannot be seen: the aqueous humour very turbid, and particularly so in the *right* eye which he says he can see best with; iris in both eyes very irregular and immoveable. There is a lichenous eruption on his body which he says he first observed three months ago; it is unaccompanied by sore throat or other constitutional symptoms. Says that he had a gonorrhœa two years ago, but he denies ever having had a chancre.

Cap. ol. terebinth. 3j. ter die.

23d, He only took one dose of the turpentine yesterday; the pain however is very much diminished, bowels open.

Cont. med.

24th, Took his three doses regularly yesterday. Says that he suffers no pain now, and that his sight has very much improved; the aqueous humour in both eyes is evidently clearer, the redness remains as yet uninfluenced by the medicine. Rep.

25th, The pain has returned with increased violence—inflammation of the conjunctiva much worse, and he complains of the discharge of hot tears: took the turpentine regularly yesterday, bowels open; no strangury or increased flow of urine. To lose eight ounces of blood from each temple immediately and to continue his medicine.

Pulv. jalap, c. 3j.

26th, Much better; pain quite gone; the inflammation of conjunctiva is very acute, and he says that his sight is not so clear to-day. To apply six leeches to the lower lid of each eye and to continue his medicine.

27th, Only applied three leeches to each eye; the inflammation is however a little diminished. To repeat the leeches to-day and to continue taking his medicine.

29th, Complains to-day of a little pain in his right eye; inflammation of conjunctiva diminished; aqueous humour clearer; pupils remain very irregular and fixed.

Gutt. belladonnæ.

Cont. ol. terebinth.

Oct. 1st, Has taken the turpentine regularly, but complains that it gives him pain when making water; bowels open. The inflammation of both eyes remains much the same.

Omittr. ol. terebinth.

Pulv. jalap, c. 3j.

Rep. gutt. bellad.

8th, Has not taken any of the turpentine since the 1st: the drop of belladonna has been applied regularly to each eye every morning, and his bowels have been freely acted upon by the compound jalap powder, all pain in making water has ceased; the inflammation in both eyes is considerably diminished and he can see better. The lichenous eruption is much thicker all over his body.

Cap. ol. terebinth 3j. ter die.

Rep. belladonna.

11th, The left eye is better; sclerotic inflammation diminished, pupil rather more contracted but nearly circular, aqueous humour clearer. This right eye is worse, conjunctival and sclerotic inflammation a good deal increased, and the iris has two small elevated spots on its surface; sight more dim; does not complain of any pain but a sensation of heat in this eye. The turpentine causes strangury, but not to that degree to prevent him continuing to take it. To apply six leeches to the right eye.

Pulv. jalap. comp.

Infus. lini. p. p.

13th, Very little inflammation remaining in the left eye; but in the right it is much the same, pupils of both more dilated and regular. Takes the turpentine regularly now without any unpleasant effects. Rep. med.

20th, Has taken his medicine regularly since the last report. The left eye is now quite well excepting a slight irregularity of pupil. The inflammation of the right eye is also considerably diminished; the eruption has disappeared in some degree about the arms, but remains very plentiful on his back.

Cont. ol. terebinth.

Rep. belladonna.

Nov. 3d, To-day the ung. argent. nit. is applied to the right eye to relieve the chronic turgesence of the vessels which appears to be all that remains of the disease.

Omittr. ol. terebinth.

5th, No redness whatever remaining; the pupil is however rather irregular. Gutt. belladonnæ.

10th, Returned to-day with slight inflammation of the conjunctiva of both eyes. Ung. arg. nit.

20th, Since last report he has not had any complaint.

Case kept by Mr. Taylor.

Case 4. Syphilitic Iritis treated by the Oleum Terebinthinæ. — William Anderson, æt. 37, admitted Nov. 5th, 1829, states, that about a twelvemonth ago he had sores on the penis and suppurating buboes, for which he was salivated in the Winchester Hospital. About three months after, a lichen appeared on the arms, sometimes disappearing, but not entirely, and always reappearing in the course of a month. He has at present a few spots remaining on the arms, shoulders and legs, also a large crop on the back of the neck—has had a sore throat for the last three months. The iritis is of the right eye and has existed about a week. The iris is changed in color and irregular—is also much contracted, and does not obey the stimulus of light. The sclerotic inflammation is intense, extending to the conjunctiva of the lids—vision is nearly lost — complains of great pain round the brow, and a sense of soreness in the ball of the eye, attended with great lacrymation.

Mist. terebinth. ℥j ter in die.

7th, Iris irregular—more changed in color

—anterior chamber rather cloudy: complains of having suffered severe pain in the brow last night, which lasted three or four hours.

Cucurb. cruent. ad ʒxij. temp.

Mist. rep. ter in die.

8th, The cupping has removed the pain—says he thinks he sees better—iris still much contracted and irregular—color not so much changed—sclerotic inflammation much relieved. Says that he does not feel any nausea, but that he has great pain in the penis on making water. Bowels confined.

Pulv. jalap. c. 3iss. statim.

Mist. rep. ter in die.—App. gutt. bellad. ad. ocul.

Dec. hordei ad libitum—p. potu ordinario.

9th, Mist. rep.—Dec. hordei.

10th, Pupil dilates a little—is rather irregular—iris slightly changed in color—sclerotic inflammation is nearly removed—is entirely free from pain in either eye or head—complains much of strangury, having severe pain in the whole course of the urethra, after the discharge of some bloody urine which occurs every half hour.

Omitte mist. terebinth.

Pulv. jalap, c. ʒiss. statim.

Gutt. bellad.

Cont. dec. hordei.

11th, Iris has regained its original colour—pupil very nearly regular—sees a great deal better—there is still some slight sclerotic inflammation—eruption appears much the same—complains severely of the strangury—states that it prevents his sleeping during the whole night, being obliged to rise every ten minutes. The powder had not any effect.

Cucurb. cruent. ad. ʒxij.—à perineo.

Hyd. submur. gr. vj. h. s. s.

Pulv. rhei. 3ss. mane sumend.

Gutt. bellad.—cont. dec. hordei.

12th, Sees a great deal better—has not had any terebinthina for the last two days on account of the irritation it produced—was ordered to be cupped yesterday on the perineum, but was cupped on the temples by mistake—strangury still severe.

Gutt. bellad. Decoct. hordei ad libitum.

14th, Iris is again much changed in color, with contracted pupil—sclerotic inflammation very severe—vision as imperfect as in the commencement of the complaint—complains much of the strangury—has bloody and painful micturitions every hour.

Hyd. subm. gr. vj. h. s. s, Magn. sulph. ʒj. mane.

Cont. dec. hordei.

15th, is free from pain in the eye—thinks he sees a little better—sclerotic inflammation not so severe— iris still much changed in color, with irregular pupil—has less pain after making water, and he does not pass so much blood.

Pil. rep. et magn. sulph Dec. hordei.

Gutt. belladonnæ.

17th, Is much improved—says that he sees much better and his eye feels stronger, and free from pain—strangury much less severe.

Gutt. bellad.

19th, The iris has regained its proper color—signs of inflammation are gone, and all the pupil still remains partly irregular—vision a little imperfect—strangury nearly gone.

Gutt. belladonnæ:

Case kept by Mr. Foot.

XXXIX.

WINCHESTER COUNTY HOSPITAL.

FUNGUS HÆMATODES.*

The diagnosis of this horrible disease is frequently so obscure that it is an object to place before the public as many well authenticated cases as possible. To those who are connected with great hospitals the facts thus stored up are not perhaps of vital importance, as they see not a few of the same kind in their pauper practice. But to those who have not such opportunities for seeing cases, the power of reading them becomes a matter of great consequence, and to that class of readers we would especially address ourselves. Persons will sometimes ask with great simplicity or would-be wit, the cui-bono of publishing cases of malignant disease, and enquire how such inform-

* Prov. Med. Gaz. No. II.

ation helps them towards the cure. If such querists were at all acquainted with practice, they would know that an accurate diagnosis not seldom obtains a man more credit than the most scientific and masterly treatment. Of the the truth of the former every one can judge, but any ass may cavil at the latter. With these remarks we proceed to the consideration of some interesting cases of fungus hæmatodes, recorded in our esteemed Provincial contemporary.

CASE I. *Fungoid Tumour of the Eye—return of the disease after extirpation.*

G. Merrel, æt. 40, labourer, admitted with the globe of the left eye enlarged to three times its natural size, projecting from the orbit, uncovered for a space of three inches by the palpebræ, which are pressed backwards against the arch of the orbit and form a complete girt round the base of the diseased mass. The palpebræ, are œdematous and livid in colour; the globe has entirely lost its natural structure, being of fleshy color, medullary structure, and mottled on its surface with varicose veins. In the centre of the diseased globe is a deep black slough from which a bloody sanies constantly exudes and excoriates the integuments of the cheek over which it passes. He has occasional deep and lancinating pain extending to the temple and ear of the left side, and occasionally "into the substance of the brain itself." Considerable emaciation, anxiety, and dejection of countenance—sallow lemon-colored complexion——sleep broken with convulsive twitchings—appetite impaired—pulse 96—bowels open. There is no glandular enlargement.

He dates the commencement of his complaint to a severe blow on the eye from a cricket ball received six months ago. An acute attack of inflammation succeeded the injury, and five weeks after a second attack followed which ended in the present disease. The nature of his case being fairly explained to him, and the slight chance of success which was promised even from the operation, the patient determined to try what the knife would do. Accordingly in ten or twelve days from his admission extirpation of the eye was was performed in the following manner.

"The patient being laid in the recumbent posture on his back, with the head slightly elevated, the operator placed himself behind and commenced by making a transverse incision at the external canthus, so as to extend the fissures of the palpebra, and thereby to afford, by giving more space, a greater facility for the extirpation of the diseased parts; a curved needle, armed with a thick ligature, was then introduced through the centre of the swelling, and the ends held firm by an assistant. A convex double-edged scalpel was next inserted deep into the orbit, immediately below the orbitar process of the os frontis, and carried around the circumference of the diseased parts, including the lachrymal gland; this incision being completed the eye was drawn forwards by the assistant which exposed the optic nerve, which was divided, and the extirpation concluded. The operation was no less difficult than unsatisfactory, from the firm, deep seated, and extensive adhesion, and communication of the diseased parts, with the periosteum lining the vault of the orbit. No hæmorrhage of consequence ensued. The palpebræ were approximated—simple dressing, with a compress wetted in zinc lotion, applied—the patient removed to his bed and an anodyne draught exhibited."

The patient went on exceedingly well, was put upon the bark, and in fact became in every respect convalescent. Unfortunately, however, these cheering prospects were blasted and the patient's hopes darkened by a return of the lancinating pain in the orbit, in the night of the 39th day after the operation. The spirits now became depressed, the strength broke down, and hectic fever was established. The upper palpebra swelled, the lancinating pains grew more severe, fungous granulations sprouted from the orbit and occasioned more disfigurement than the original disease, and on the 54th day the poor fellow left the hospital at his own request in a pitiable state.

The section of the tumour, as frequently happens, gave no satisfactory information respecting the origin of the disease. All

the humours and coats were more or less destroyed; the choroid, as far as could be recognized, was converted into a dark, compact, pigmentous substance; and the excised portion of the optic nerve was much altered in appearance, and surrounded by large fungous tubercles of brain-like consistence, which projected towards the circumference of the orbit, and "appeared to have been the matrix of the disease."

So much for fungus hæmatodes of the eye, a horrible and most malignant disease. The chances of success from an operation are faint enough, Heaven knows, when performed in the early stage of the malady, but the consequences of extirpation when ulceration has once taken place are well embodied in the details of the foregoing case.

CASE 2. *Fungus Hæmatodes of the Submaxillary Gland.*

Mrs S. æt. 38, seven months gone with child, applied as an out-patient with a swelling beneath the skin about the size of a large walnut, of a conical figure, quite immoveable, and apparently firmly attached to the symphysis of the jaw—over the most prominent part of the skin was of dull red colour, and it gave the sensation of fluctuation. She was emaciated and weak, and complained that her health had been deranged for some months. The tumour had scarcely existed two months. The patient considered it an abscess and was anxious that it should be opened, but this 'of course' was not complied with, and merely a belladonna plaster applied. The patient did not return for upwards of three weeks, when the tumour was the size of a very large orange, and from its centre issued a fungus reaching as low as the sternum, and bleeding freely at the slightest touch. It appeared that on the day she left the hospital she had induced a surgeon to puncture it with a lancet. Three or four ounces of blood escaped from the opening, the wound would not close, and in less than eight hours the fungus made its appearance, and subsequently continued rapidly to increase.

An opiate poultice and opium in pill were prescribed, but at the expiration of five days the patient was suddenly taken in labour, gave birth to a healthy boy, and died in twelve hours after her accouchement. No examination of the body was permitted.

The reporter remarks that most probably some important visceral disease existed, or death would not have ensued so prematurely. This is a conjecture which may or may not have been the fact; for our own parts we doubt it. The reporter likewise suspects that the disease originated from the periosteum of the maxilla, another conjecture which has not been put *hors de combat* by dissection. Of one thing we are very sure from the results of some experience, viz. that the fungus hæmatodes does not originate so frequently in the periosteum as is commonly believed. Had we time and space we could mention some interesting cases in confirmation of our opinion, but we prefer saying a word or two on a practical point, the puncture of the tumour. Every one knows that fungus hæmatodes often presents a deceptive appearance of fluctuation, and that good surgeons have punctured it for abscess. But every one is not aware of the occasional bad effects of such an error. In the present instance a fungus arose from the wound in the short space of eight hours, and in another case which fell under our own observation the result was fatal. The case to which we refer occurred in a public hospital; it was one of a tumour on the head which looked like an encysted tumour and had been punctured by a country surgeon. A probe was introduced and a good deal of exploration instituted, strange constitutional symptoms, with delirium, succeeded, and in two or three days the patient died. On dissection the disease was found to have been malignant fungus closely allied to the hæmatoid disease of Hey, springing from the cranial diploë, and destroying both inner and outer table of the scull. We think these cases, and they are by no means solitary, ought to teach practitioners caution in thrusting their fingers and their lancets into every tumour that falls in their way.

CASE 3. *Fungus Hæmatodes of the Breast.*

A. S. æt. 24, unmarried servant, admitted with a formidable unlargement of the left breast, which presents a capacious ulcerated opening at its upper part and a sloughy fungus projecting through it—breast elastic and very heavy—integuments uniformly smooth, but thickly studded with enlarged veins—axillary glands enlarged—no pain. Her health is completely broken up—constant short cough without expectoration—shortness of breath—great weakness without emaciation—expression of countenance anxious and left cheek constantly flushed—loss of appetite—little sleep—pulse 130, and small—catamenia regular.

Six month ago received an accidental injury on the part, and in a few days the whole mamma became extremely tender and sore when pressed, with much general swelling, but no redness. Leeches and lotions were repeatedly applied without benefit, for the breast daily increased in size and deep-seated pain supervened, which extended into the axilla and beneath the scapula. Six weeks ago had a severe attack of erysipelas over the whole breast, side, and back, which lasted six days, and terminated in the ulceration before mentioned through which the fungus has protruded. With the disappearance of the erysipelas she lost all pain.

Under these melancholy circumstances the operation was very properly considered inadmissible, and the patient returned to her friends, with whom after lingering for three weeks she died. Her mother and three other members of the family had died of the same disease.

Some ignorant humanity-mongers might think perhaps that the surgeon, Mr. Lyford, did wrong in discountenancing an operation in the foregoing case. We will tell them the results in an instance of a similar kind. A woman was admitted into St. George's Hospital with ulcerated fungus hæmatodes of the breast. The disease was extirpated by Mr. Keate, the wound rapidly cicatrized, and the patient left the hospital. In a month or thereabouts she returned with several tumours on the head. Paralysis and coma supervened, and the patient died a miserable object. On dissection there were four or five tumours of fungus hæmatodes growing from the cranial diploë, pushing inwards on the dura mater, and outwards through the external table; one of them entered the orbit. The lungs presented a few medullary tubercles; the liver was almost destroyed by them. This case shows the strong tendency to the recurrence of the disease after removal of the ulcerated fungus, but patients not unfrequently die of the immediate effects of the operation. A middle aged woman was lately operated on at St. George's Hospital for an ulcerated tumour of the breast, something between scirrhus and fungus hæmatodes. In a day or two erysipelas appeared, attended with nervous symptoms, and low constitutional disturbance. The patient become delirious, or rather maniacal, for there was no tendency to violence; the erysipelas faded, and and at the end of about five or six days from the operation she died. On dissection there was nothing found to account for the fatal result. We mention these cases to illustrate the dangers and gloomy issue of operations for ulcerated fungus. We are not amongst those who think much of the powers of surgery even in the earlier stage of the disease, but nevertheless we are bound to say that the prospect is brighter under such circumstances. A young woman had the thigh removed near the hip-joint for fungus hæmatodes, not ulcerated, and although it is upwards of a year since the operation we believe there has been no return of the disease. Many persons would esteem even the chance of such fresh lease of life as this worth the pain, and misery, and risks of an operation. They should have their option, and it is some satisfaction to be able to assure them that they *may*, under favourable circumstances, rub on without a return of the disease, for several years.

XL.

WORCESTER INFIRMARY.

I. EMPYEMA, WITH EXTERNAL TUMOUR.

Th. Booth, æt. 62, was admitted into the Worcester Infirmary, April 5th, 1828,

under the care of Mr. Sheppard, with an oblong tumour, about the size of the section of a turkey's egg, situated over the cartilages of the four inferior ribs on the right side, about four inches below the mamma. It was free from pain; of irregular form, with a disk of inflammation on three of its most prominent points; firmly attached and immoveable at its base; lobulated and knotted in its feel; somewhat elastic upon pressure; and giving the sensation of a fluid in different cysts. He said that he had struck the part in September, that the pain, which was first severe, soon abated, and that two months after the injury he discovered the tumour then about the size of a large nut. Since that time it had gone on increasing, but he attributed the inflammation on the surface, to the use of a strong solution of salt, about three weeks before his admission.

On the 8th, the tumour was punctured with a lancet, when there issued a quantity of fetid pus, containing an innumerable quantity of hydatids, most of them about the size of small nuts. The integuments collapsed, but on coughing, the tumour instantly filled, and pus and hydatids spouted from the wound, when the effort was made. A small dossil of lint was inserted into the wound, a poultice laid over it and the patient sent to bed. In the night of the 9th, he had rigors, and on the 10th there was fever, urgent cough with dyspnœa, and pain about the wound with abundant discharge. Leeches and purging procured relief, and on the 12th the former were repeated, with a bolus of five grains of calomel and five of antimonial powder, followed by castor oil, and salines with antimony. On applying the stethoscope above the right nipple, the respiratory murmur was very distinct, whilst below that part it could not be heard. On directing him to cough the gurgling of fluid was heard in the chest; the left side appeared to be sound on auscultation.

We need scarcely pursue the diurnal details, suffice it that the cough and expectoration lessened, on the 26th, the respiratory murmur was heard below the right mamma, and on the 28th of June he left the infirmary. He was at this time much improved in his general health, the cough was very slight, and the discharge reduced to the quantity of an oz. and a half in the 24 hours. He returned to a laborious employment that of a woodman, and presented himself at the Infirmary in last June, apparently in very good health, having merely a little discharge from the wound occasionally.

We think it must be evident that the above was not a case of empyema, in the fair acceptation of the term, that is, a case in which pus was effused into the general cavity of the pleura. The gradual progress of the complaint, the little comparative disturbance to the respiratory system, the limited tumour, the character of the discharge, the auscultic indications, and last not least the very successful issue of the case, all combine to prove that the pus and hydatids were confined in a restricted cavity, most feesibly between the pleuræ, with surrounding adhesions of those membranes. This encysting of fluid by partial adhesions of the pleuræ plays a very important part in modifying symptoms, whether that fluid be serum or pus. In the latter case, or encysted empyema, if we may use such a term, the patient has a thousand times better chance of ultimate recovery from an operation, than when the matter foams abroad in the general pleural cavity. We could give some interesting cases to illustrate these points were space allowed, but for the present we must content ourselves with merely hinting thus briefly at the subject.

II. HEMIPLEGIA—EMPLOYMENT OF STRICHNINE.

"James Jevons, æt. 10, came into the Infirmary, May 30th. Has partial paralysis of the right side; occasional head-ache; the pupil of the left eye contracts very irregularly; pain and tenderness in the hypogastrium; intellect much impaired; memory very bad; looks idiotic; tongue, when projected from the mouth, is directed towards the paralytic side; bowels costive; tongue clean; pulse 84, weak. About Christmas last, had a fall from a cart, and received a severe wound over the left orbit, from which time he has complained of occasional head-ache. Has had symptoms of hemiplegia for five weeks; has been under surgical care, but obtained only temporary relief. Applic. hirud. xii. lateri capitis sinist. Sumt. haust. cathart. 1oz. statim. et repet. post horas tres, si opus fuerit.

"June 2nd.—Is much relieved by the application of the leeches; head more free from pain; can raise his arm with more ease; walks better; pupils of the left eye contracts more regularly; tongue projected from the mouth in a straighter line, can move it to the left side with ease, which he could not do before; answers questions more readily. 3rd.—Rept. hirud.

cras; perstet in usu haustus cathart. omni mane. 6th.—Is much better since the application of the leeches. 7th.—Applic. emp. lyttæ lateri capitis sinist postea. Ung. antim. tart. ibidem. 9th.—Can use his extremities with much more facility; pupil of the left eye contracts naturally. 14th.—Sumt. mistur. cathart. p. r. n. 16th.—Opens the hand much easier, the extremities much less paralytic. 19th.—Sumt. strichninæ, gr. 1-6 ter indies. 24th.—Continues to improve. Rept. emp. lyttæ capiti.

"Julx 7th.—Has continued to improve under the use of the strichnine; augeatur dosis strichninæ ad gr. 1-3 ter die."

As improvement evidently *preceded* the strichnine in the present case, and as the drug was only exhibited from the 19th of June to the 7th of Jnly, (for there the report stops,) we cannot in justice attribute very much to its influence. However, we are witnessing a case of paraplegia in a boy, where the strichnine would seem to be producing good effects, and no doubt can exist that the remedy has often proved of service. It is worth experimenting with in these obstinate and melancholy cases.

III. SUPPOSED HEPATITIS.

Ann Williams *twenty* years of age, was admitted on the 30th of May with severe pain and tenderness in the hepatic region and abdomen—slight pain in the *head*—catamenia regular but *profuse, and occasioning great debility during their continuance*—pulse 84 and *weak*—appetite bad—want of sleep at night—tongue white and loaded—bowels open. She had been ill five days, and attributed the attack to cold from going out of doors insufficiently clad. Previous to this, she had had a cold in her head to which she was very subject, and fourteen months before, she had been laid up for four months with a similar attack to the present, preceded by an inflammation in the left elbow. Twelve leeches were applied to the right side, with relief to the pain, and she was ordered next day an antimonial pill and sulphate of magnesia. On the 1st of June she was better, but complained of pain in the right side of the chest. On the 5th, the pain in the side was increased and leeches were again applied. On the 7th, the pain in the side was better, and the pain in the head was gone. On the 9th, there was a slight relapse of the former, the leeches were repeated, and on the 14th, she was able to be made out-patient.

We really see not a shadow of evidence that *hepatitis* existed in the foregoing case, unless *pain* in the *right* side be considered a sufficient pathognomonic sign of the disease. In point of fact, this case was one of those nervous or hysterical cases which are constantly met with in practice, and constantly mistaken and mistreated. A *young* woman with disordered menstruation, in some cases it is scanty in others profuse, is attacked with severe pain in the right side or the left, perhaps with a little cough, almost always accompanied with pain in the head. A routine or unwary practitioner will take the alarm, inflammation will be conjured up, and the long array of depleting measures be directed against the supposed phlogosis, till the patient is either strong enough to throw off the disease, and what is ten times worse the doctor, or sinks into a state of hopeless debility. Unfortunately this is not an imaginary case, and at the present moment we have before our eyes a melancholy instance of such mischievous medication. With proper precautions, these hysterical pains are not difficult to distinguish from those that depend on inflammation or organic alterations. They are always too general for the latter, and exist at the same time, or in quick alternation, in the head, the chest, the liver, the colon;—they are mostly superficial and aggravated to an extraordinary degree by the *slightest* pressure; they are much more severe than the sufferings from actual disease, which, in fact, they caricature; and finally they are exasperated in the long run, by depletion, at least in nnety-nine cases out of the hundred. As we previously observed, they occur for the most part in young unmarried females, with disordered menstruation, and very frequntly indeed in those affected with chlorosis. The general health is often good, occasionally indifferent, but *never* implicated in proportion to the local sufferings. There is commonly costiveness of the bowels, and much flatulence; not seldom the *globus*, and other decidedly hysterical symptoms.

These complaints are annoying and obstinate at the best, but under improper treatment their inveteracy and intensity are increased a hundred fold. Depletion will never do; on the contrary, those remedies

are indicated that regulate the bowels and the menstrual secretion, and improve the general health. The practitioner must choose his remedies from the list of antispamodics, emmenagogues, and tonics, not from the deadly catalogue of antiphlogistics. The subject is one of such practical importance, that we shall return to it more at large on a future occasion.

XLI.

OBSERVATIONS ON PULMONARY CONSUMPTION. By Dr. PARRISH.

Our readers are well aware that we have often expressed our doubts respecting the usual modes of treatment employed by medical practitioners in the scourge of the world (for England is not the only country which it loves to ravage) phthisis pulmonalis.—The paper from which we mean to make some extracts, is from the pen of one of the most distinguished physicians of America, Dr. Parrish, and his observations deserve particular attention.

Dr. P. confines his remarks to that form of pulmonary consumption which is characterized by the presence of tubercles—and which he justly considers as essentially scrofulous in its nature, and too often dependent on hereditary predisposition. His remarks are directed entirely to the treatment of the complaint, and that based on a very long and ample experience. When first he entered the profession he was enamoured with the doctrines of Rush, who viewed pulmonary consumption as an inflammatory disease, and, consequently, employed various antiphlogistic measures for its relief, as frequent bleedings, a rigid system of diet, confinement to rooms of regulated temperature and depressive medicines. Dr. Rush conjoined mercury. "But whatever plan was adopted, the poor patients generally went one course, and that rapidly—they died." Dr. Parrish, in the course of a few years, began to doubt the doctrines of Rush.

"My doubts were indeed very early excited by the opposite results of two apparently very similar cases of the disease, which occurred at the same time and in the same neighbourhood, and one of which I myself attended in consultation with Dr. RUSH and another highly distinguished physician. I will relate these cases, as strongly illustrative of the inefficacy and injury of vigorous medical treatment in this complaint.

"The patient whom I attended was a young man, not more than twenty-four years of age, the eldest child of an anxious and affectionate father, whose wealth enabled him to command every possible assistance, and who, having lost a wife with pulmonary consumption, was alarmed by the first appearance of the symptoms in his son, so that no delay was incurred in commencing the treatment, and no means were spared which it was thought might be productive of advantage. As it was in the beginning of winter that we were called to the patient, our first object was to obviate the effects of the weather: we therefore had him placed in a spacious apartment, the air of which was maintained at a uniform temperature by night and by day throughout the season. This was effected by means of a soapstone stove, and a thermometer suspended in the room. The treatment at first consisted in a system of rigid dieting, with small and frequent bleedings and the use of mercury. Ptyalism, however could not be induced; and as the patient grew worse under the present plan, we laid aside the mercury, and resorted to diaphoretics. Sulphur and tar-water were also prescribed, under the impression that they had been useful in similar cases. But our remedies appeared to make no impression in the disease which marched steadily forward. Various medicines were afterwards used with little advantage; among the rest, acetate of lead, which was given in the dose of two grains every two hours for several days in succession, with the effect of diminishing the frequency of the pulse; but as it induced symptoms of colic, we were under the necessity of abandoning it. At this period I visited the patient twice every day, and my two colleagues every morning; and nothing was omitted which occurred to the experience or sagacity of those highly distinguished physicians as likely to be product-

ive of benefit. At length that stage of the disease arrived in which a supporting treatment was thought to be required. A stimulating diet, with tonics of various kinds, was now resorted to; but all our efforts were unavailing. The patient came under our care in the early part of winter and died before the close of the following spring.

"In the immediate neighborhood of this young gentleman resided a student of medicine, afterwards a respectable practitioner. In the preceding summer, while resident pupil in the Pennsylvania Hospital, he had been attacked with hæmoptysis, in the treatment of which a vigorous course of depletion had been pursued. The hæmoptysis disappeared, but was followed by considerable debility. A visit to the country did not restore his health, and he returned in the fall too unwell to resume his duties in the hospital. At the commencement of winter, any one upon observing the two patients, would have supposed that the student was further advanced in the disease, more reduced, and more likely to pass away than his unfortunate neighbour. He was pallid, emaciated, had cough and fever, in fact, exhibited all the marks of confirmed consumption. He resisted, however, all attempts to induce him to submit to medical advice, from a belief that the practice which would be adopted, would tend only to hasten a fatal issue. The winter passed with no other treatment than the occasional use of slight palliatives, as paregoric to allay cough; and the spring which saw our patient carried to the grave, opened upon this young gentleman still alive. As soon as the weather permitted, he went into the country, and furnishing himself with a horse, sick and debilitated as he was, commenced the life of a country doctor. Strange as it may appear, he rode himself into perfect health. He acquired an extensive practice, married, and became the father of several children. He afterwards returned to the city, and fell a victim to typhus fever, contracted during his attendance upon the business of the dispensary. This happened ten or twelve years after the winter above alluded to; and not a symptom of his former complaint was observable for a long time before the period of his death. I often conversed with this gentleman relative to his case, and remember being told by him, that he found no remedy so effectual in relieving his distressing chillness as a ride on horseback. In the midst of a chill, while sitting by a large fire, having the back of his chair covered by a thick coat or blanket, and yet unable to keep himself warm, he would receive a message from a patient at a distance requiring him to mount his horse. Almost immediate relief would be experienced from the exercise, and a ride of a few miles would produce so much excitement as to restore him to comfortable warmth."*

The doctor had frequent opportunities afterwards of observing the injurious effects of rigid anti-phlogistic treatment—and its almost invariably fatal result. He at length came to the conclusion, that neither depletion, nor any medicine, nor any combination of medicines, would cure the disease, or even materially alleviate the symptoms.

"I recollect a case of pulmonary consumption, in which a rigid anti-phlogistic diet, adhered to for some time, had of itself the effect of producing a great increase in the excitement of the pulse, which was allayed by a change to more nourishing food. The circulation even of a healthy individual may be brought into an irritated state by depriving the system of that support from a due degree of food, air, and exercise which is essential to the preservation of a just balance in all its operations. Take a robust man, confine him in a close room, bleed him repeatedly, diet him strictly, keep up action in his bowels by purgative medicine, and allow not a breath of air to blow upon him, and if I am not greatly mistaken, his pulse will become frequent and irritated, with the occurrence of night sweats, and perhaps sizy blood; in fact that very condition of system will be produced, for which, in cases of phthisis, these measures are recommended as remedies. Now it is well known, that in consumptive patients there is generally a preternatural irritability; and it is reasonable to infer that this irritability must be aug-

* North American Medical and Surgical Journal, No. XVI.

mented by the means which are sufficient to produce it in a healthy man; so that the system will thus be rendered less capable of resisting the operation of morbid causes, and may sink under the local disease which it might have otherwise withstood for many years, perhaps ultimately have surmounted.

"But, though the antiphlogistic course of treatment, and the use of powerful medicines, are calculated rather to co-operate with the disease of the lungs in reducing the system of the consumptive patient, than to relieve or eradicate the complaint, yet we are not therefore to surrender all hope, and yield up the sufferer an unresisting victim. On the contrary, much may be done by exertion on the part of the individual affected in controlling the disease; and instances are not wanting in which it would seem to have been entirely conquered.

"Vigorous exercise, and free exposure to the air, are by far the most efficient remedies in pulmonary consumption. It is not, however, that kind of exercise usually prescribed for invalids—an occasional walk or ride in pleasant weather, with strict confinement in the intervals, — from which much good is to be expected. Daily and long continued riding on horseback, or in carriages over rough roads, is, perhaps, the best mode of exercise; but where this cannot be commanded, unremitting exertion of almost any kind in the open air, amounting even to labour, will be found highly beneficial. Nor should the weather be scrupulously studied. Though I would not advise a consumptive patient to expose himself recklessly to the severest inclemencies of the weather, I would nevertheless warn him against allowing the dread of taking cold to confine him on every occasion when the temperature may be low or the skies overcast.

"I may be told that the patient is often too feeble to be able to bear exertion; but, except in the last stage, where every remedy must prove unavailing, I believe there are few who cannot use exercise without doors; and it sometimes happens, that they who are exceedingly debilitated find, upon making the trial, that their strength is increased by the effort, and that the more they exert themselves, the better able they are to support the exertion.

"It is said by those who oppose this kind of treatment, that the lungs are in a state of inflammation, and therefore require rest. But, admitting for a moment that the tubercles in pulmonary consumption are the result of ordinary inflammatory action of a chronic or subacute character,—an opinion, however, which I have already disclaimed, —yet the argument will not hold in the present case; for, from their very organization, the lungs cannot be at rest. From the moment we begin to breathe to the latest period of life, they are necessarily in continual motion. We cannot confine them as we can a diseased joint; and in attempting to restrain their motions by keeping the body at rest, without gaining our object, we generate a degree of irritability of system, which enables the local affection to operate upon the general health with a vast increase of delcterious effect.

"I was much pleased to meet with a confirmation of my views relative to the management of pulmonary consumption, in the following extract from a work of Dr. COLIN CHISHOLM, whose experience entitles his opinion to great respect. 'An active, bustling occupation of time,' he says, 'with exposure to what may be called and deemed hardships; such as occur in military service during an active campaign, or in maritime service of any kind; have sometimes produced a most wonderful change in a constitution broken down by phthisis. I have known instances of officers in both services recovering their health by seemingly inconsistent means. *One thing is most certain, that confinement to the atmosphere of a room, or even house, is most highly prejudicial:* it renders the person infinitely more susceptible of the impressions of cold, and thereby tends to augment the evil which it is supposed calculated to remedy."

Dr. Parrish next relates a few instances where this mode of life was attended with beneficial consequences. We shall rapidly glance at some of these.

"The late Dr. Baldwin had a strong hereditary disposition to pulmonary consumption, having lost a father and several brothers by the disease, and being himself attacked with it soon after he graduated, and while a resident at Wilmington. Aware of the inefficacy of the usual treatment, he determined to try change of climate and great bodily exercise. In the midst of winter he embarked for Savannah, and on his arrival there, he set off on foot for MILLEDGEVILLE, the capital of the state, one hundred miles distant. His friends at Savannah considered the attempt as madness, his health was in such a dreadful state.

"Disregarding, however, their representations, he took from his trunk some necessary articles of clothing, tied them in a handkerchief, ran a stick through the bundle, and placing it on his shoulder, set off on his pedestrian journey. As the country was but thinly settled, he endured many hardships and privations, being sometimes compelled to wade through streams, and often taking up his lodging in cabins, among people as untutored as the Indian, and partaking of their homely fare of ham and corn bread. Arriving safely at the capital, he there met with Colonel Hawkins, agent for the United States among the southern Indians, by whom he was treated with great attention, and invited to accompany him to his residence. He accepted the invitation, and having passed the winter at the Agency, found himself, upon the opening of summer, nearly restored to health."

The disease was suspended for six years, when it again assailed him, and he sunk a victim to the insatiate enemy. The following extract, though not exhibiting what might be termed specific and unequivocal evidence, is yet well worthy of perusal and consideration.

"A young physician, who had been a pupil of my own, was, soon after entering into practice, attacked with fistula in ano, for which I operated upon him. The fistula was small, but much indisposed to heal; and a long time elapsed before a cure was effected. Very soon afterwards he was attacked with hæmoptysis, from which he had scarcely recovered, when the symptoms of consumption became manifest. I watched the progress of the case with great solicitude. Necessity compelled him to use great exertion to gain a livelihood, and I was often surprised to find him confined by an attack of spitting of blood, and a few days afterwards running about among his patients in the lanes and alleys of the city. I am convinced that his life was protracted at least one year longer than it otherwise would have been, by the great exertion to which the stimulus of necessity excited him.

"Similar effects I have repeatedly witnessed in other cases. During my attendance in the Philadelphia Dispensary, my attention was occasionally attracted by patients affected with consumption, whose situation in life left them only the alternative of labouring for their support, or of becoming tenants of the Alms-House. The strong aversion, entertained by many of the poor to entering this institution, serves as a powerful incentive to exertion; and I remarked that some patients, who were by this cause induced to struggle by their labour for a support to the very last, continued longer, and bore their disease better than others, whose circumstances were considered much more comfortable.

"From a fine, healthy-looking practitioner of New-England, who some years ago brought me a letter of introduction, I received the following account. In early life he had been affected with pulmonary consumption, and, while still labouring under the disease, had commenced the life of a country doctor. As there happened to be an uncommon degree of sickness in the neighbourhood at this period, he was compelled to make great and unusual exertion; and the result was a perfect restoration to health. In the course of conversation he said to me (I copy his words); 'I have left a patient at home labouring under pulmonary consumption, with directions to ride ten miles every day, be the weather what it may.' This was in the winter season.

"The following notice, handed me by Dr. GILMAN, was drawn up by a gentleman of Ohio, the father of the Doctor, and dated Marietta, 1823. 'In the year 1804, Thaddeus M. Harris, a clergyman of Massachusetts, called at my house in Marietta, and from him I received the following account. He had left Dorchester, Massachusetts, that spring, so low in consumption, that neither he, nor any of his friends had an idea that he would be able to reach Hartford, Connecticut, distant one hundred miles. He arrived there, however; and, though still very weak, he was encouraged to prosecute his journey to New-York. When there, finding that he was gaining strength, he concluded to proceed to the western country. On his arrival at Marietta, he was so well as to be able to ride forty miles a day to preach, and was in fact quite recovered. He returned to his parish in Dorchester in good health; and the last time I heard from him, which was about two years since, he was still well.'

"A gentleman of this city, when a young man, came under my care, during the winter season, affected with cough and hectic fever. I felt great solicitude in his case, and determined to try the effect of horseback exercise. In compliance with my advice, he rode daily through the winter, and in the spring was evidently improved. The summer opened upon him still affected with alarming symptoms. It was during the late war; and in the course of the season camp Dupont was formed. The young man joined one of the volunteer companies, marched down with the rest, and was subjected to all the hardships of a camp life. His health and strength increased; and he is now a hearty man, free from all signs of pulmonary disorder.

"Another very interesting case occurred to me with a similar result. A little son of a respectable citizen of Philadelphia was affected with cough, hectic fever, profuse sweats, and great emaciation; and there was every reason to believe that his lungs were affected with tuberculous disease. Entertaining the conviction that any active medical treatment would insure a fatal termination to the case, I strenuously opposed the use of remedies which were pressed upon the parents by the kindness of their friends. Among the rest mercury was proposed. Happily they were disposed to listen to the suggestions of their physician, and no active treatment was employed during the winter. At the opening of spring, the child was sent into the country, with directions that he should have the benefit of free exercise and the open air. He returned free from the pulmonary complaint, has since passed through the hooping-cough and remains well to this time.

"I shall close this list of cases, by giving one more illustration of the comparative effects of exercise, and of confinement, in the cure of consumption. Shortly before the death of Dr. WISTAR, an interesting young lady was brought from New-Jersey, to consult him for chill, fever, pain in the breast, cough, and considerable loss of voice. These symptoms presented a gloomy prospect. The Doctor being absent on a journey when the lady arrived, she came under my care; and I had seen her several times before his return. We afterwards visitied her together, and made a very minute examination of her case. Dr. WISTAR having been travelling over the mountains, in which mode of life he took great delight, was fully prepared to appreciate the effects of air and exercise. We had retired for the purpose of a consultation, and had re-entered the apartment, when looking round the room, he made this remark to me: "Doctor, do you not think it looks confined and close here? Do you not think it would be best to send her back to the country, and direct her to ride every day?' I concurred heartily in the proposition. We put a seton in her side, and then advised her to return home, and use exercise. The winter passed over. The following summer she visited Philadelphia greatly improved in health, and, as I afterwards learned, became perfectly well."

Dr. Parrish concludes by expressing his conviction that, "in the management of

consumption, no remedies are so efficient as fresh air and active continued exercise." Speaking of the practice usually pursued in this disease, he gives it as his decided opinion that, "if patients affected with phthisis were universally left to themselves freely in the open air, the general result would be a longer continuance of life, and a greater number of recoveries."

Without concurring, to the full extent, in the opinions of Dr. Parrish, and without having so much confidence in air and exercise as he seems to have, we believe, from some curious facts within our knowledge, that there is considerable foundation for what he advances. If, in health, we find regular exposure to the open air the very best *preservative* against coughs and colds, there is reason, from that very fact, to think that a careful exposure to the same, gradually commenced and steadily persevered in, might, in some cases at least, exert a *curative* influence. It is abundantly evident that this experiment requires great caution, and a sound discretion. The system of "air and exercise" should be commenced in the summer, and in the most gradual manner, imperceptibly augmenting the amount of each. By the approach of winter it will be ascertained whether the plan is likely to agree, and if it does, the system may be pursued, to a greater or less extent, through the Winter and Spring. The writer of this article has had many opportunities of ascertaining and experiencing the astonishing influence of exposure to the open air, as a preservative against colds, and many other complaints. Between the 5th September and the 5th December of the past year, he travelled 3500 miles in the open air, by night and by day — in hot, cold, dry, rainy, and even snowy weather, without once catching cold, or any other complaint. He has experienced the suffocating sirocco in the forenoon, the chilling tramontane in the afternoon—the heavy dews of the evening—and a storm of sleet and snow before the morning—all in the course of 24 hours—and all in the open air, without the slightest bad effect; but, on the contrary, with a kind of certitude or conscious feeling of being completely proof against aerial vicissitudes. An example or two may not be quite uninteresting.

On the 2d November, at Naples, the sirocco had blown all the preceding night, and till nine o'clock in the morning, with a most suffocating warmth and humidity that rendered life a misery. At ten o'clock the wind chopped round to the north-east, and the writer set off in an open carriage for Herculaneum and Pompeii. The breeze was very strong, and, in the whole course of his life, he scarcely ever felt the cold more intense than during the drive to Pompeii. While wandering among the ruins of that disinterred city, he was alternately scorched with a still powerful sun, and chilled with the tramontane blast, according as locality placed him in a northern or southern aspect. To this was added fatigue as well as hunger. The whole day was spent among the ruins, and the journey back to Naples was in the night, with heavy dews descending; yet no cold was caught nor ill consequence suffered. A more severe trial was undergone a fortnight afterwards. On the 16th November he slept at a small town called FINALE, between Genoa and Nice, on the Mediterranean shore. He was travelling in a little open calesh, with one horse and a guide at this time. The next day's journey to St. Remo was a long and rugged one, and it was necessary to start at four o'clock in the morning. During the night, the formidable BIZE wind set in with great force, and the rattling of the doors and window-shutters of FINALE, precluded all attempt at sleep. At half-past four o'clock in the morning of the 17th November, they were winding their way, in the dark, up a zig-zag path in the mountain, along a precipice of a thousand feet perpendicular above the sea, and with overhanging rocks, of one or two thousand feet above them. The gale gradually increased as they ascended, and before they had reached the highest point, it was a perfect hurricane, and the road completely obscured by snow. The guide's courage failed, and he proposed to turn back, as the road was devoid of parapet,

and not above 12 or 14 feet in breadth. The horse, however, was totally incapable of facing the storm, which was adverse to their return. They were therefore obliged to scramble onwards, at the imminent risk of being hurled over the precipice along which they were winding in the dark. The cold, the horror,—let it confessed, the *terror*, of that morning, can never be effaced from the memory! The howlings of the wind, the roaring of the surges against the rocks beneath, the drifting of the snow, the piercing cold of the blast coming down from the Alps in fitful tornadoes, the occasional crash of fragments of rock from the impending steeps, the total obliteration of all trace of the road by the sleet—and last, not least, the thoughts of "friends and native home," while exposed to imminent peril on this frightful pass, may be imagined; but Heaven forbid that they may ever again be experienced by the benighted and way-worn traveller! By the time that day-light appeared, the poor guide was nearly dead with fatigue (being obliged to lead the horse the whole way) and the narrator was as nearly dead with cold and anxiety. When objects could be discerned, the Mediterranean beneath them was one continuous sheet of foam from the violence of the hurricane, and the whole of the surrounding mountains were covered with snow. The weary travellers had 17 miles farther to proceed before they breakfasted. With the rising sun confidence was inspired—the dread of danger vanished—the circulation returned to the half-frozen extremities—and not the slightest physical inconvenience followed the severest trial to which the narrator was exposed during a long life of wanderings.

XLII.

NOTHING NEW UNDER THE SUN.

In a late excursion to POMPEII, and examination of the various antiquities rescued from the oblivion of two thousands years beneath the ashes of Vesuvius, the Editor of this Journal was interested by the numerous chirurgical instruments of our Pompeian forefathers collected in the Museum of Naples. His attention was particularly arrested by WEISS'S DILATOR, the original of which may there be seen, so precisely similar to that manufactured in the Strand, that, excepting the handles (one of which is in bronze and the other in ivory) it would be extremely difficult to distinguish the ancient from the modern INVENTION. Upon expressing his surprise at this remarkable coincidence, after a lapse of twenty centuries, the Curator of the Studii (the learned Abbé Jorio) observed that it was probably no coincidence but a *consequence*. He informed Dr. Johnson that, about ten or twelve years ago, a French gentleman took a memorandum of the instrument in question, and soon afterwards brought out at Paris a *modification* of the Pompeian Speculum or Dilator.* Now Mr. Weiss, while improving on the Parisian invention, did actually stumble upon the plan of the original instrument, so that, if the handles were of the same materials, it would be imposible to say which was the elder. It appears from this that of the two modern inventors, Mr. Weiss is the more original and ingenious. The Parisian disguised the model from which he worked, and made a clumsy in-

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* The Abbé Jorio, the gentleman in question, has put the following note at the foot of page 116 of his account of Pompeii.

"Cet interessant instrument (speculum matricis) a été publié par une étranger, mais le dessin en ayant été *fait de memoire*, n'est pas du tout exact."—PLAN DE POMPEII.

The "*fait de memoire*" is, we fear, a too amiable construction of the *deviation* which the French mechanist made in the instrument. The want of candour, however, has been punished by the want of success—for had he constructed the instrument precisely as it now exists in the Museum of Naples, it would have been impossible to improve upon the plan.—J. J.

strument—Weiss, in his endeavour to improve on the furtive copy, ascended unconsciously, to the merits of the original!*

Among the Pompeian instruments there is a trocar exactly of the modern shape and size. The catheters are made of bronze, and very slightly curved, having an eye on one side, like our modern elastic catheters. There are some of these instruments without any curve whatever—shewing that the ancients knew the practicability of introducing the straight staff.

The ancients seem to have been perfectly well acquained with the *vapour-bath*. At Pompeii, Dr. J. examined one which is on a magnificent scale, and admirably adapted for the purpose of a public bath. From a very fine room, heated by braziers, an entrance leads to the CALIDARIUM, or vapour-bath, whose walls, floor, and ceiling, are double, and capable of being filled with vapour from two or three cauldrons, by means of leaden tubes. The vapour is admitted into the room itself from the hollow walls, &c. by small capillary apertures, while, at one end of the room issues forth, as from a fountain, a jet of boiling water, diffusing still more vapour through the apartment. Seats are ranged around for those who take the bath, and when finished, they retire into the room heated with warm air to dry and clothe themselves.

While observing the ingenuity of the Pompeians, it is impossible not to conclude that they were a most degenerate and depraved people. The figures portrayed in fresco on the walls even of the best houses, exhibit melancholy and disgusting proofs of the horrible depth of infamy, and even bestiality, into which they were sunk! It was high time that, like Sodom and Gomorrah, the cities of Hurcelaneum and Pompeii should be visited by fire and brimstone, to put a period to their iniquities, and draw the veil of oblivion over their obscenities! That veil, however, has been removed; and an awful catastrophe has preserved more unequivocal proofs and portraits of the private habits of the Italians than the pages of their best historians! The Pompeians have been doubly unfortunate. They were smothered in the ashes of Vesuvius, and they were destined to be exhumated, eighteen centuries afterwards, as specimens of the degeneracy of their times.

* Dr. Johnson called on Mr. Weiss a few days ago, and mentioned the circumstance of his dilator being a precise copy of that found in the ruins of Pompeii—at which the ingenious mechanic was not less astonished than gratified. That *he* did *not* benefit by the original is quite evident by the number of modifications which he manufactured (and which he still preserves, before he arrived at the present form.—J. J.

XLIII.

ON THE INFLUENCE OF IODINE IN BRONCHOCELE, SCROFULA AND ASCITES. By Dr. BARDSLEY.

In the volume of hospital facts and observations lately published by Dr. Bardsley, of the Manchester Infirmary, some very candid statements are given respecting the powers of iodine. Whatever may be the true explanation of the fact, it is certain that this medicine has not proved of such general and decisive efficacy in ordinary practice, as it seems to have evinced in the hands of those who first introduced it into notice. At the same time, it has shewn such considerable power in arresting the march of disease in many instances, that it would be most desirable to ascertain in what cases it is likely to prove of service, as well as those in which it is not. Let us glance at its effects in bronchocele.

Dr. Bardsley gives a table, which shews that he has employed the iodine in thirty cases of bronchocele. Of the thirty, nine, or nearly one in three, were cured, and in none of these had the disease existed for more than two years. Six received some benefit, and the remaining fifteen were not at all relieved.

"In several of the above instances (which are selected from some others) it

must be allowed that the iodine failed to produce any diminution of the tumours, though its exhibition was regularly persevered in for many months, and the dose of the medicine gradually increased to as great an extent as the state of the stomach and strength of the patients would allow. My experience of the powers of iodine is opposed to the following statement of Dr. Gairdner: "It seldom fails of effecting a complete cure and when it does, it almost always reduces the swelling very considerably."* In some cases large tumours have been much diminished in a short space of time under the external and internal use of iodine, but *in not a few instances* the beneficial influence of this remedy has been solicited in vain. Iodine will unquestionably be found a valuable medicine in some examples of bronchocele, but it is by no means entitled to the character of a specific in that affection."

We fancy that these opinions will accord pretty nearly with the experience of most unbiassed practitioners. Dr. Bardsley is led to think, from the results of his trials, that iodine is a remedy at least of equal, if not superior, efficacy, to any of the numerous substances that have been proposed for the cure of scrofula. He has seen it succeed, on several occasions, in removing enlarged scrofulous glands, after the failure of other plans of treatment. Dr. Bardsley has also been anxious to test its *real virtues* in a tuberculous state of the lungs. Need we mention the results of such experiments?—Our author has derived little or no benefit from iodine in paralysis; nor, except in two cases, has he ever witnessed any good effects from it in chorea.

"I have also made trial of iodine in chorea, but never witnessed any good effects from it, except in two cases. I am at a loss to account for the difference between the results of my experiments with iodine in paralysis and chorea, and those of Dr. Manson, for in his hands this remedy has proved almost uniformly successful. I wish, however, explicitly to remark, that I place the greatest reliance on the accuracy of Dr. Manson's observations, and his known candour and respectability of character entitle his statements to confidence. It is worthy of remark, that with several young females labouring under chorea, to whom I have administered the iodine for some time, the menses have not made their appearance until the 16th year. This I merely throw out as a conjecture, whether the action of the medicine in question upon the uterus could have any effect in retarding menstruation. It is a well-established fact, that iodine exerts a powerful action on the glandular system, for the mammæ occasionally undergo considerable diminution in size during its use. This is a point of some importance in the selection of this remedy for females."

In ascites depending on *supposed* enlargement of the liver iodine has appeared to our author to be a medicine of great efficacy, and the following cases are adduced in support of his opinion.

Case 1. Edward Placey, æt. 40, applied at the Infirmary, about the end of August, 1826, with a considerable quantity of fluid in the abdomen—occasional pain in the right hypochondrium—loss of appetite and strength—sallow countenance—urgent thirst—and feeble pulse. He had formerly indulged to excess in the use of spirits, and laboured under the foregoing symptoms for about eight months. After the removal of the pain in the hypochondrium by the use of a few leeches and a blister, ten drops of the solution of the hydriodate of potass (30 grains of the salt to an ounce of distilled water) were ordered to be taken thrice daily. When the blistered surface had healed half a drachm of an ointment composed of two scruples of the hydriodate to an ounce of axunge, was rubbed in night and morning. In the course of six weeks an evident amendment occurred, the urine became more copious, the thirst less troublesome, and the patient's strength improved. The dose of the solution was gradually increased to twenty drops three times a day, and friction with the ointment was at the same

* "Vid. opus ante cit., p. 35."

time continued. At the end of three months Placey was discharged cured, without having experienced any unpleasant effects from the use of the iodine.

"*Case* 2. JAMES PILKINGTON, 35 years of age, came under my care in June, 1827.

"He had enjoyed a tolerably good state of health until December, 1826, when he noticed a slight fullness of the abdomen.—On his first appearance at the Infirmary, the liver was found to be somewhat enlarged, but not at all painful on pressure, and there was a very perceptible fluctuation of water in the belly. His countenance was pale, and appetite and strength much impaired. As I was desirous of giving the iodine a fair trial, I commenced at once with that medicine, in the same proportion as was employed in the preceding case. This plan was pursued with little variation until the 16th of August, without any marked benefit. Twenty drops were now ordered to be taken three times a day, and a drachm of the ointment to be used morning and evening. The report of the 24th of September, as taken verbatim from my register states, that an increased flow of urine, and considerable diminution in the dropsical swelling, had been produced by this medicine." The iodine was exhibited until the 4th of November when the patient wished to be discharged, in order to resume his usual occupation as a carter."

"*Case* 3. Wm. Arnold, æt. 50, became an out-patient on the 24th of March, 1828, with fluctuation in the belly; the hardened edge of the right lobe of the liver extending into the epigastrium; complexion slightly yellow; spirits much depressed; pulse feeble; bowels costive; urine scanty and high coloured. He had laboured under loss of appetite and debility for more than six months, but had only observed the swelling in the belly for two. The same prescription as in the foregoing case was employed, and the iodine continued with only slight benefit till the middle of June, when an obvious improvement occurred, and continued to increase till the end of August, when the dropsical swellings had entirely disappeared, and recovery was complete. He was discharged cured, and has since enjoyed good health.

"*Case* 4. JOSEPH MAJOR, 43 years of age applied to me on the 4th of July, 1828, on account of an ascites which had existed for nearly six months.

"He had a slight cough, with little expectoration, and some difficulty of breathing.—The urine was diminished in quantity, and high coloured. The pulse was feeble and strength impaired. The right lobe of the liver was somewhat enlarged and indurated. The alvine evacuations were tolerably natural. He had taken a variety of diuretics and mercury, but with very little effect. A blister was applied to the chest, and an ordinary linctus ordered for the cough. August 1st. The respiration has become free, and the cough has entirely disappeared. He was now directed to take the iodine in the manner before noticed. Sept. 7th. No amendment has as yet resulted from the medicine. Ordered to continue. Oct. 22d. During the last week, he has passed much more water and felt rather stronger. To persevere with the iodine. Nov. 24th. The swelling in the belly is considerably reduced; and so much benefit has already accrued from the remedy as to encourage a further trial of it. December 4th. He has persisted in the use of the iodine since the last report, and without perceiving any ill effects from it. The dropsical effusion is quite gone, and his health is better than it has been for the last few years."

Case 5. Sarah Fielding, æt. 49, of intemperate habits, applied in June 1828, with evident ascites and an unnatural fulness about the region of the liver, which, however was not tender upon pressure. Her countenance was sallow and her bowels costive. She dated her complaints to a severe attack of fever in August 1827, since which she had never recovered her health; the enlargement of the abdomen with scantiness of urine had existed for about two

months, and followed an attack of pain in the right side and loins. After obtaining a regular action of the intestinal canal by the aid of mild purgatives, iodine was employed as before. On the 2d of August her urine was sensibly increased, and the collection of fluid in the belly was somewhat diminished. This slight amendment encouraged her to persevere in the use of the medicine; by the 4th of November she felt quite well; and so she still remains.

The remarks of Dr. Bardsley on these cases are so sensible and so candid that we have nothing further to say, than that we perfectly agree with him.

"The preceding examples, it must be admitted, are too few to establish the powers of iodine in dropsy, but they serve to show that occasional advantage may be derived from that remedy, in some instances of dropsical effusion, where there is reason to suspect obstruction to the free return of the blood. It is very possible that the benefit in these cases may have arisen in a different manner from what I have supposed, or that it might have been produced by other means; but still that great good was derived from the iodine, cannot for a moment be doubted. In dropsies proceeding from disease of the lungs, the heart, or its large vessels, scirrhous enlargement of the liver and spleen, and some other causes, our art can afford but little service; still it is more particularly in ascites depending upon some enlargement of the liver, or the presence of steatomatous tumours in the abdomen, that iodine is likely to afford some chance of relief. Dr. Abercrombie says, that he has seen very good effects from the external use of iodine in several cases of chronic affections of the liver.* I have also used this medicine in cancerous affections of the mammæ and uterus, but with an unsuccessful result. In the whole of the above trials with iodine, I have employed internally a solution of hydriodate of potass in the proportion of half a drachm to an ounce of distilled water; and as an external application, two scruples of the salt to an ounce of axunge. The dose of the former has been ten drops twice and thrice a day, gradually increased to twenty, at the same intervals; and of the latter, a drachm has been directed to be rubbed in over the part affected night and morning. It is scarcely necessary to add, that caution must be observed in the internal exhibition of iodine, and the dose must be gradually increased; for, like other powerful medicines, if heedlessly employed, it is apt to occasion serious consequences.

* Pathological and practical Researches on Diseases of the Stomach, the Intestinal Canal, the Liver, &c. p. 360.

XLIV.

TWO CASES OF GASTRIC IRRITATION PRODUCING SYMPTOMS RESEMBLING APOPLEXY AND EPILEPSY. By Professor Wood, of Philadelphia.*

A partial suspension of the cerebral functions is well known to be an occasional attendant upon irritation in the stomach. In some instances the symptoms so closely resemble those of diseased brain that the physician is in some danger of mistaking the real seat of the disorder, and consequently of misapplying his remedies. We may, however, generally form a correct judgment from the preceding history of the case; and when this cannot be ascertained, may often satisfy ourselves by observing the effects of pressure upon the epigastrium.

"A young man, an engraver by profession, and subject to dyspepsia, was suddenly attacked about an hour after his evening meal with an affection supposed to be apoplectic. When I arrived he was lying on his back, without motion, wholly unable to see or hear, and showing no sign of sensibility, even when pretty smartly shaken.

* North American Medical Surgical Journal, No. XV.

He had not fainted; for the respiration and circulation continued; and the absence of stertor, with the natural condition of the pulse, was incompatible with the notion that the disease was apoplexy. Having learned that he had eaten cucumbers and whortleberries at his tea, and that he had afterwards complained of headach with nausea, I had little doubt that the root of the evil would be found in the stomach. An emetic was accordingly addministered, which, after a much longer interval than usual, operated freely, and brought away the undigested berries and cucumbers, which were undoubtedly the cause of irritation. Sensibility was now speedily restored; and after an attack of most violent spasm in the bowels, which was relieved by laudanum and castor oil, the patient recovered his usual health. He had never before been affected in a similar manner.

"Little more than a month has passed since I was requested to visit a gentleman said to be in a dying state. I found him apparently without sensation, his eyes open and turned up, his hands clenched, and his body alternately motionless, and agitated by sudden and universal tremors, which caused the bed to shake beneath him. He was a stranger, and there was no one present who could give me a history of his case. In order to explore into its nature I placed my hand upon his epigastrium; but scarcely had I touched the skin when he started up as though a bullet had been driven through him. Uncertain whether the coincidence might not be accidental, I repeated the experiment several times, and at each time the slightest pressure was sufficient to throw the whole frame into immediate and violent, though brief convulsions. Sufficient evidence was thus afforded of the seat of the disease, but not of the precise nature of the irritation. As his pulse was active I bled him freely, and immediately afterwards applied a large sinapism over the region of his stomach. Consciousness was so far restored a few minutes after the bleeding, that upon being asked in a loud voice if he felt sickness or pain in the stomach, he nodded in the affirmative. An injection of assafœtida was now administered; and under the united influence of this remedy and the mustard plaster, he revived to some knowledge of his situation, and was able to drink very freely of warm water, which I urged upon him. This soon produced the discharge of a considerable quantity of acid liquors from his stomach, and restored him for a time to complete consciousness. He now told me that he was subject to gout, of which he had recently had an attack in his foot, but had relieved himself by bathing the affected part with hot vinegar. The nature of the case was evident. While he was yet speaking, he was seized with a sudded spasm of the stomach, which threw him into his former state; and this alteration of consciousness and insensibility was repeated several times within the course of a few minutes, each return of pain being so severe as at first to throw the whole nervous system into violent agitation, and then to overwhelm it for a time in complete torpor. I now applied sinapisms to the feet, and gave a mixture of laudanum and the aromatic spirits of ammonia; and at the end of about four hours from the commencement of the attack, left my patient very greatly relieved. A dose of the compound tincture of rhubarb, with a proper regulation of diet, was afterwards sufficient to complete the cure.

XLV.

On Inflammation and Suppuration of the Spleen. By A. Raikem, M. D.

Enlargements of the spleen, tubercles on its peritoneal coat and capsule or even in its interior, cartilaginous-like induration of its surface, and softening of its texture, are alterations of frequent occurrence when compared with the formation of abscess in organ. Those viscera that contain most cellular membrane are always most prone to the formation of abscess, which is thus more common in the lungs than in any

other parenchymatous structure. The spleen being chiefly composed of blood-vessels does not evince the same disposition to the formation of pus as the pulmonary tissue. On the contrary, suppuration in its substance is so rare as to make any well attested histories of the affection worth the perusal of the scientific physician. The following interesting case is published in the Repertoire d'Anatomie, tome VII. 8129, by Dr. Raikem, of Volterra.

Case. Louis Gazzani, ætatis 20, a book-keeper, of sallow complexion but strong constitution, was addicted to indulgence in spirits, especially rum and punch, and had been affected with syphilitic symptoms. After complaining for some weeks of pain in the left hypochondrium, he was attacked with gastric symptoms, in the early part of June, 1829, for which he took a mineral water that vomited and purged him briskly. On the following day Dr Raikem was summoned to the patient, whom he found suffering from deep pain in the left hypochondrium increased upon pressure—pulse frequent, hard and jerking—skin hot—tongue covered with a yellowish fur—nausea—loss of appetite—alvine evacuations yellow and liquid. In the evening there was a paroxysm preceded by cold in the feet, and on the following morning there was a remission of the symptoms, though the fever continued and the pulse was still strong and sharp. On the following days the fever appeared to assume a remittent type, and after the employment of cooling drinks and emollient glysters our author prescribed the quinine. The fever still continued, the pulse was upwards of 90 hard and jerking, there was nausea and frequent vomiting, the stools were liquid, and the strength declined. Besides these symptoms the patient complained of lancinating pains increased on pressure in the left hypochondrium, and a hard tumour could be felt in that region. The complexion now became more yellow and the symptoms experienced an exacerbation every evening, all which circumstances led our author to pronounce that the case was one of inflammation of the spleen terminating in suppuration.

Warm baths, fomentations, lavements, a blister to the left side, mercurial inunction, the internal use of calomel and digitalis, and refrigerant drinks with acetate of potass were the means pursued. The tumour, notwithstanding made progress, extended to the linea alba and umbilicus, was the seat of violent pain, and became softer in proportion with its growth. Having reached this extent, it again diminished in volume, and the pain was considerably mitigated, but the patient began to suffer from a sense of intolerable dragging and constant lancinating pains in the left lumbar region, where œdematous swelling and deep fluctuation were discovered. This was the spot where the blister had been applied, and the slightest pressure exasperated the sufferings. Thinking that the pus had escaped from the spleen and passed behind the peritoneum and between it and the muscles, to this situation, Dr. Raikem requested M. Nic. Bianchi, an able surgeon, to meet him in consultation, and consider the propriety of evacuating the matter by an incision. For reasons which we not need not detail, it was not deemed advisable by the consultants to run the risk of the operation, to which the patient likewise refused to submit. The pains in the lumbar region soon ceased to be severe, but the fever and other symptoms grew rapidly worse; the belly was blown up, and painful on the left side from the hypochondrium to the groin; a hard, very painful, and circumscribed tumour appeared in the latter situation; the breathing became hurried, laborious, and attended with pain on inspiration; there was frequent dry cough; difficulty of lying on either side; pulse rapid and weak; partial sweats on the surface of the body; prostration of strength; diarrhœa; and, on the 25th of July, about two months after our author's first visit, the unfortunate patient expired.

Sectio Cadaveris.—In the left side of the chest, were upwards of two pints of yellow serum with flakes of lymph. The pleura was coated with a layer of false membrane,

and various bands of recent lymph connected the pleura costalis and pulmonalis with each other. The lobes of the lung were adherent, but the pulmonary texture itself was sound. The right side of the chest shewed nothing unusual: there were some ounces of yellow serum in the pericardium.

On opening the abdomen, some "elastic fluid" escaped. The liver was healthy; the stomach and intestines appeared to to be so too, but they were not laid open. The superior portion of the descending colon, and the great end of the stomach, were closely united to the spleen. This latter viscus was double its ordinary size, and of vermillion colour on its borders. The peritoneum opposite its posterior surface was raised by a whitish, thick, purulent, and very fetid fluid, which was found to have issued from the cavity of a vast abscess in the substance of the spleen. From this it had extended between the peritoneum and the abdominal muscles as far as the kidney, the spine, and even as low as the crural ring. The extensive fetor of the matter prevented any more minute examintion.

Dr. Raikem makes some valuable remarks on the preceding case, which he illustrates by others, collected with great labour and research from the older and most approved writers. In order to render the present article more complete, we shall take the liberty of borrowing a few of our author's facts. Though *Haller* and *Baillie* agree in pronouncing suppuration, i. e. abscess, of the spleen to be rare, still several instances are recorded in the Répertoire de Médicine pratique of *Plouquet*, and our author has sometimes observed it in the bodies of patients who have suffered from intermittent fever. *Frank* enumerates accurately the different modes by which an abscess in the spleen may be avacuated;—viz. by opening into the stomach, when it produces vomiting of bloody pus; into the colon, with diarrhœa and discharge of the same kind of matter by stool; into the left side of the chest, or even into the lung, with the symptoms of phthisis pulmonalis; into the abdominal cavity, or finally into the cellular texture between the peritoneum and dorsal, or abdominal muscles. In the last mentioned case, the patient most commonly dies with the ordinary symptoms of destructive suppuration, but nevertheless there are instances of recovery on record. *Fantoni* mentions that an abscess of the spleen discharged itself at the umbilicus, but the patient recovered, was brought to bed of a male infant, and did not die until five years afterwards. On opening the body no vestige of the spleen remained, and the neighbouring parts were united together by cicatrices, in the usual situation of the missing organ. In another instance, related by *Grottanelli*;—a Franciscan Monk, ætatis 67, who had suffered from intermittent fever, experienced pain in the region of the spleen which was hard and painful. In about three weeks a tumour appeared with fluctuation, and threatening of suppuration, and three days afterwards the abscess burst, and discharged matter of "a steatomatous and albuminous character." During the first three days, about four pints of the fluid were discharged in the twenty-four hours, a probe introduced obliquely upwards to the height of four inches occasioned no pain, but when carried downwards pain was complained of. The patient recovered with permanent enlargement of the spleen, and lived for two years, when he died of fever.

With regard to the effusion of the contents of a splenic abscess into the peritoneal cavity, we need scarcely cite cases to prove its fatal consequences. The following, however, is so well marked an example that we cannot forbear giving the brief particulars.

A young female orphan about ten years old, who had suffered from obstinate intermittent fevers, was admitted into the hospital of Pitigliano on the 16th of October, 1820. She was much emaciated, but presented an unusual tumefaction of the abdomen, which at first was taken for ascites, but proved in a short time to depend on an enlargement of the spleen which extended from the left to the right hypochondrium,

and passed lower than the umbilicus. The patient laboured under fever, with occasional dry and very troublesome cough, irregularity of the bowels, and frequently retention of urine. In spite of the remedial measures employed the fever and the pain increased in violence till the 27th of October, when suddenly the sufferings ceased, the tumour disappeared almost entirely, and the patient could lie on either side. Next day she insisted on getting up notwithstanding every remonstrance, and that night the belly swelled greatly, dyspnœa supervened, and she sank on the morning of the 30th. On examination after death the peritoneum was found injected, and the abdominal cavity contained upwards of two pints of limpid serum; gelatinous-like, concrete matter was found in the pelvis; and the same invested the surface of the spleen. The colon, the great end of the stomach and the contiguous peritoneal surface of the spleen, which was about nine inches in length and five in breath. The anterior and inferior part was in a state of suppuration and exhibited a large rent with destruction of substance extending to its posterior portion. The sound part of the viscus was covered with false membrane, and the part of the diaphragm in contact with the spleen was inflamed. Several of the mesenteric glands were obstructed; the omentum was nearly destroyed. The left lung was inflamed in its inferior part and studded with a number of softened tubercles. *Grottanelli, de Splenite.*

But although so generally fatal, cases have been related by authors with the view of shewing that rupture of the spleen or of an abscess into the belly is not so invariably. *Grottanelli* in the work already cited adduces the following.

A man residing in the environs of Aquapendente, about twenty years of age, who had suffered from venereal affections, went in 1810 to reap in the commune of Sienna and was seized with a double tertian fever. The spleen also swelled and grew very painful, but in proportion as the fever subsided under proper treatment the spleen returned to its natural size. Some time afterwards, having travelled on foot in rainy weather, he was attacked with intermittent catarrhal fever, about the fourth day of which the spleen again swelled and grew painful. Nausea, vomiting, pain in the left shoulder, and slight cough succeeded—the pain in the splenic region was relieved by fomentations, whilst the tumefaction remained—the fever was quotidian and hectic in its character, and the patient now refused to submit to any further treatment, and had recourse to wine. About a month after this he received a violent kick in the belly, which brought him to the ground and he was carried home insensible. He recovered his faculties in the course of a quarter of an hour, and declared that at the instant of receiving the blow, he felt a most horrible pain in the region of the spleen. He could only lie upon the back with the chest much raised, and on looking for the tumour in the left hypochondrium it *could no longer be discovered.* In the course of twenty hours from the infliction of the injury the skin was universally covered with spots like the ecchymoses of scurvy, and the urine became so loaded that it resembled the alvine dejections of an infant. This state of the urine continued for three months when all the pain and fever had entirely vanished, and seven years after this occurrence *Grottanelli* found the man at Civita-Vecchia enjoying excellent health. He adds that he pointed out the individual to his companions, *quasi tabulam d naufragio ereptam*, like a plank saved from a shipwreck.

The next case is likewise to be found in Grottanelli's work, in which it is inserted by Professor Bazelotti. Antoine Columbi, of delicate constitution, laboured under swelling and occasional pain in the spleen, and appeared to be disposed to phthisis. One day, whilst in the environs of Monterotondo, he received a violent kick from an unruly horse in the left iliac and hypochondriac regions, which felled him to the ground and deprived him of his senses. Being carried home he complained of very violent pain in the region of the spleen, fever supervened, and the surgeon who at-

tended bled and purged him freely. For several days the urine was bloody and thick, but the patient in the end recovered perfectly.

Whether this is to be considered as another *plank* saved by chance or by skill, is more than the doctor ventures to inform us. We cannot consider it a satisfactory instance of recovery after effusion of the contents of the spleen, into the abdominal cavity, neither do we think the first case conclusive, although more difficult to get over than the present. It is always dangerous to admit such important pathological points as that now involved unless their correctness be fully established by the scalpel after death. At the same time the cases are not devoid of interest, and we think that the paper is worth the attention of our readers, since it comprises more than is commonly known on the subject of inflammation and suppuration of the spleen.

XLVI.

PECULIAR AFFECTION OF THE PERICRANIUM, ACCOMPANIED WITH REMARKABLE SYMPTOMS, AND GENERALLY RELIEVED BY DIVISION OF THE MEMBRANE.

Dr. Abercrombie, in the second edition of his valuable work on the Diseases of the Brain and Spinal Cord, has an interesting chapter on a peculiar affection of the pericranium, occasionally met with in practice. Sir Everard Home was, we believe, the first who gave an accurate description of the disease, and Dr. Abercrombie has furnished such a neat abrégé of his opinions, that we cannot do better than copy the latter.

"In the cases related by Sir Everard Home,* the symptoms in general were headache, with various uneasy feeling in the head, and a painful tenderness of the scalp at a particular spot, with some degree of swelling or thickening of the integuments at the place. In one, the sight and hearing were considerably impaired; and in several of the cases there were fits resembling epilepsy. They were treated by dividing the integuments and pericranium freely down to the bone, and then dressing the wound with lint, so as to allow them to heal slowly with suppuration. In making the incision, the pericranium was found morbidly sensible, and considerably thickened; and in some of the cases indurated, approaching to the structure of cartilage. This treatment was in some of them followed by immediate and permanent relief; in others the the patient continued liable to fits or head symptoms upon any excess. In some of them, the incisions healed without any affection of the bone being discovered; in others, a portion of the bone appeared white and porous, or honey-combed, and a limpid fluid appeared to percolate through it, which returned immediately as often as it was wiped off. In one of these cases, the porous piece of bone exfoliated after the wound had been dressed with dry lint for six weeks; the wound then healed, and the cure was permanent. In another, after waiting eight weeks for the exfoliation, he touched it repeatedly with diluted nitric acid, after which it exfoliated, and the cure was permanent. In one fatal case he found the pericranium thickened into a mass of a fibrous bony texture, and corresponding to this part internally, there was a similar thickening and induration of the dura mater. Most of these cases had been treated by long courses of mercury without benefit, in some of them with aggravation of the symptoms."

Mr. Crampton has described a disease somewhat similar in many respects, under the head of periostitis. It may be remarked, however, that Mr. C.'s cases do really resemble common inflammation of the periosteal tissue more than Sir Everard Home's although there is a family resemblance between them.

"Among Mr. Crampton's cases, affecting various parts of the body, there are two

* "Transactions of a Society for the Improvement of Medical and Surgical Knowledge, vol. iii."

remarkable examples of it in the head ; the one acute, the other chronic. In the former, a boy of 14, the complaint began with a small angry tumour on the right side of the nose, from which, after some days, a swelling extended along the right eyelids and forehead, with considerable erysipelatous inflammation and fever. On the ninth day, he became suddenly comatose, then convulsed and died on the 12th. On dissection, the pericranium covering the frontal bone was found red, thickened, and detached from the bone, much purulent matter lying between them. Internally the dura mater was detached to an extent corresponding to the external disease, and a greenish puriform fluid was effused between it and the bone. The inner surface of the dura mater was also covered with pus ; the pia mater was red, very vascular, and covered with pus to the extent of two inches on the part corresponding to the principal disease of the pericranium. The other case is that of a woman, aged 32, who was affected with a tumour the size of a walnut over the left parietal bone. It was soft and elastic, and its origin was ascribed to a blow six months before ; there was an opening in the tumor, by which a probe could be passed down to the bone. She had intense pain in the left side of the head ; the right arm was wasted and paralytic, and the fingers were contracted ; both lower extremities were feeble ; her speech was indistinct ; she had vomiting, and frequent epileptic fits. The tumor was divided freely down to the bone, and in doing so the pericranium was found hickened, firm, fibrous, and morbidly sensible.—It formed the principal part of the tumour. The bone under the tumour was found rough and superficially carious. A portion of it was removed by the trephine, and the dura mater under it appeared very vascular, and rather thickened. For six days after the operation she had fever, extensive erysipelas of the head, delirium and convulsions. Suppuration was then established, and all these symptoms were relieved In the course of a cure a slough was detached from the dura mater. A fortnight after the operation she recovered the use of her arm, and was free from complaint."

Tissot, Ponteau, and others describe cases which bear some resemblance to those of Sir E. Home and Mr. Crampton, but the likeness may be fanciful, the comparison unsafe, and we therefore pass on to an instance related by Dr. Abercrombie himself.

Case. "A servant girl, aged about twenty, fell backwards with a child in her arms, and received the full force of the fall upon the most prominent part of the occipital bone. She soon recovered from the immediate effects of the injury, but continued to have pain in the part ; and after several months was seized with paraplegia and retention of urine. She was now confined to bed for three or four months, after which she recovered the use of her limbs in a tolerable degree, but the retention of urine continued, and she came to Edinburgh in the beginning of 1828, which was more than a year after the accident. The paraplegia was now nearly removed, but she had still retention of urine, requiring the constant use of the catheter. On the seat of the injury on the occipital bone, a round portion, the size of a crown piece was acutely tender, and very moderate pressure upon it produced complete insensibility, which continued a minute or two, and returned as often as the pressure was repeated. It had the appearance of syncope, but the pulse was not affected. In this state I saw her along with Mr. Lizars, and it was agreed to make a free crucial incision through the part, and to keep the wound open by dressings so as to promote suppuration. In doing so, the pericranium was found tender and somewhat thickened, but the bone was sound. On the following day she passed her urine freely, and she continued free from complaint as long as the wound continued to discharge. It healed at the end of a fortnight, and the retention of urine returned immediately. The incision was now repeated with the same result as before, her urine being freely passed almost immediately. Various means were then employed to promote a more complete

suppuration from the wound, but it healed after two or three weeks, and the retention of urine returned as before, with considerable tenderness in the affected spot. A third incision was then made with the same effect as before, and various applications were made with the view of promoting exfoliation of bone, as in Sir Everard Home's cases, but without success, and the wound again healed after three or four weeks.—The fits of insensibility on pressure now returned, which had not returned after the former incisions, and along with them the retention of urine.

"Since that time repeated incisions have been made with similar results. The principal change in her situation now is, that she has got free of the fits of insensibility upon the spot being pressed; and the effect of the incisions has continued longer, as on several occasions she has remained free from the retention of urine for several weeks after the incisions were healed, and at one time enjoyed perfect health for three months.

We must confess that we are not without our misgivings on the real nature of the foregoing case. The age of the patient, the progress of the symptoms, the retention of urine, and the syncope without affection of the pulse, are features that look but too like those of hysteria, not to stagger our belief in the existence of organic disease. We have seen, and every practical person has seen also, worse symptoms than these dependent on the Proteian disease in question, and we verily believe that retention of urine and pain in the head aggravated by the slightest touch are amongst the more common of its forms. Of course we do not venture to pronounce that Dr. Abercrombie's case *was* one of hysteria, but we think that reasoning on the published data, always inferior to personal examination, its aspect is suspicious.

We remember having witnessed a case of the kind described by Sir Everard Home, some years ago at St. George's Hospital.—It was that of a widow, about 30 years of age, who presented some tumefaction over the left temporal ridge of the parietal bone, very tender upon pressure, accompanied with dimness of vision, much pain shooting to the opposite side of the head, disposition to slight vertigo, and numbness of the hands. There was an odd expression about the eyes and aspect which had rather a maniacal cast; her general health was pretty good. She dated her complaints to a severe blow upon the part received seven years previously, which stunned her at the time, and since the infliction of which, she had suffered more or less from the symptoms we have enumerated. Mr. Brodie, under whose care the patient was, cut down upon the tumefaction and divided the pericranium.—There was no perceptible thickening of the latter, but the bone appeared to Mr. B. to be somewhat enlarged. Several attacks of erysipelas of the face and head succeeded the operation, and it was long before she was able to quit the house. The pain in the head was certainly relieved, but we did not perceive much difference in other respects, and a few days ago, when we casually saw the individual, she was still suffering from swimming in the head, disposition to irregular flushings of the face, and other symptoms of an unpleasant character.

In a clinical lecture delivered on the occasion, Mr. Brodie mentioned one or two interesting cases which he had treated with success. A man became affected with pain in the forehead, and a tumour appeared. A fit of epilepsy succeeded, other epileptic attacks occurred at intervals, and three months after the commencement of the disease he entered St. George's hospital. There was now a considerable tumour in the forehead; Mr. Brodie cut down upon it; and finding that it looked like the affection of the pericranium resulting from scrofulous inflammation, he removed it entirely from the bone, which was rough. The pain in the head was relieved, a layer of bone exfoliated, and the patient got quite well. In another instance a woman received a blow upon the head, and ever afterwards suffered from pain in the part which was slightly tumefied. She entered St. George's Hospital complaining of pain in the head, dimness of vis-

ion, numbness of one hand, &c.; Mr. Brodie divided the pericranium, which was a little thickened, down to the bone; and this patient also recovered perfectly.

XLVII.

POST-MORTEM EXAMINATIONS OF THE KINGS OF FRANCE FROM CHARLES IX. TO LOUIS XVIII. FROM AUTHENTIC DOCUMENTS ARRANGED BY DR. HENRY DUPUY.*

There is a disposition inherent in the human mind to invest those removed from the common sphere of life, with attributes that appertain not to ordinary mortality. Who that reads the exploits of Alexander, can picture to himself the Macedonian demigod subject to those little corporeal annoyances that chafe the temper of Mr. Thompson or Mr. Smith—can imagine Hercules troubled with constipation of the bowels—or Julius Cæsar plagued with corns, albeit

He had a fever whilst he was in Spain!

But human nature is human nature still, however the grand, the moral, the intellectual *spiritus* may dazzle the eyes of the astonished world; and a hero and a costermonger suffer in no very unequal degree from those bodily inconveniences and ills to which flesh is heir. Sylla was destroyed by the lousy distemper—Napoleon le Grand, l'Invincible, as a foolish universe once thought its scourge, died of a *malignant* disease—and our own race of kings have notoriously suffered from the complaint which is usually the property of the squalid and the needy—scrofula. Some very curious and interesting documents have been published in France, respecting the examinations of the bodies of their kings, from Charles the IXth to the last Louis. Previously to the times of Charles the prejudices of the people and the opposition of the clergy restricted the examination of bodies to that of executed criminals. It was not to be supposed that the haughty sovereign of a feudal nation should descend to the level of felons, of those whom the ideas of the times would scarcely have ranked in the same class of beings as himself. It required some extraordinary event to establish the necessity for royal dissections, and such an event presented itself in the remarkable death of the ninth Charles. This Gaulish representative of the Neros and Domitians of the world, is execrable to all time by the massacre of the Hugonots at Paris, on St. Bartholomew's days, in 1572. When the hour for that dreadful outrage approached, being upbraided with indecision by the savage Catherine de Médicis his mother and the regent, he exclaimed, "well then let not one be left to reproach me with breach of faith"! He even fired with his own hand on the miserable wretches endeavouring to escape across the Seine. It was said that from this time to his death, which took place in May, 1574, he never enjoyed a tranquil hour, and various reports were bruited about respecting the mode of his disease. Many regarded the event as a punishment for his enormous crime, and asserted that he fell the victim to a *sweating of blood;* others on the contrary attributed it to the machinations and ambition of the Duke d'Alençon. In order to set at rest all rumours and dispel these suspicisions, Catherine decided that the body of her dear son should be examined, and Charles was thus the first king of France, the first descendant of Charlemagne, whose body was profaned by the scalpels of his subjects. From that time to this, the examinations of their monarchs after death has become a matter of court-etiquette in the French dominions. Before we proceed to the account of the dissection of Charles, it will be interesting to recite a few particulars respecting his mortal illness.

Papyre Masson, a writer of those times, states that he fell ill in the month of October, 1573, whilst attending his brother, afterwards Henry III, on his departure for Poland. He was first attacked with pains in the chest, which were not at all understood by his medical attendants, and continued to increase; he was worn down by

* Révue Médicale; Sept. 1829.

an "erratic" fever, sometimes quartan, sometimes continued; and in spite of all that Mazille, his first physician, could do, the disease proved fatal. L'Etoile gives an interesting account of the last days of the suffering king. On the Friday, says he, preceding the Sunday when Charles died, about two o'clock in the afternoon, he called for Mazille, and after complaining of the pain he endured, enquired if it was not possible for him, and the many other physicians whom he had in his kingdom to procure some alleviation of his miseries. Mazille replied that all which depended on their art had been done, that the very day before, the faculty had assembled for the purpose of giving relief, but that, to speak the truth, God was the only, and sovereign physician for such diseases to whom he could have recourse "I believe," said the king, "that what you tell me is true, and that you know of nothing else. *Tirez moi ma custode, que j'essaye à y reposer.*" It is reported by Guy Patin, and other writers, and with every appearance of probability, that poor Mazille narrowly escaped *hanging* by order of Catherine, for not having called a consultation sufficiently early. We cannot help thinking, that if some such plan were adopted now-a-days, it might save some patients at the expense of a doctor or two, and otherwise be attended with much service. The Latin account of the post mortem examination is curious.

"RAPPORT DU CORPS MORT DU FEU ROI CHARLES IX.

"'Anno domini miles, quinquent. septuag, quarto pridii kal. junii, hora a meride quarta, facta est dissectio corporis Caroli IX, regis Galliarum christ, assidentibus medicis hic subsignatis et chirurgis qui eam administrarunt, in qua accuratè hæc observata et deprehensa sunt.

"'1. Hepatis totum parenchyma arefactum, exangue, et extremis lobis ad simas partes vergentibus nigricans.

"'2. Folliculus fellis a bile vacuus, in sese considens, subater.

"'3. Lien nullo modo malè affectus.

"'4. In ventriculo nulla noxa, et stomachi cum pyloro integritas.

"'5. Intestinum colon flavum colorem contraxerat, cæteris benè habentibus.

"'6. Epiploum malè coloratum, supramodum extenuatum; parte aliquâ ruptum, et omnis pinguidinis expers.

"'7. Ren uterque nullo vitio obsessus, nullo similiter vesica, nullo uretres.

"'8. Cor flaccidum et velluti contabescens: omnis aquoso humore, qui pericardio contineri solet, absumpto.

"'9. Pulmo qui in partem sinistram thoracis incubebat, a costis illegitimis ad claviculas usque totus lateri adhærebat, ita firmiter et obstinatè, ut avelli potuerit sine dilaceratione, et discerptione cum putridine substantiæ, in qua sese prodidit vomica rupta, è qua colluvies purulenta, putrida et graveolens effluxit, cujus tanta fuit copia, ut in asperam arteriam redundarit, et præclusa respiratione præcipitis et repentini interitûs causam attulerit.

"'10. Alter pulmo sine adhæsu fuit, magnitudine tamen naturalem constitutionem, turgidus et distentus superans (ut et sinister superabat in substantia, insignem corruptelam præ se ferens) parte superiore putris, refertus et conspurcatus humore pituitoso, mucoso, spumoso, puri finitimo.

"'11. Cerebrum omni vitio carens."

"Medici qui præfuerunt,

"*Regii* Mazille. Vaterre. Alexis Gaudin. Vigor, Lefevre, Saint Pons.

"*Parisienses.* Piètre, Brigard, Lafilé et Duret.

"*Chirurgi regii qui administraverunt*, Paré d'Ambroise, Portail, Eustache, Dioneau, Dubois, Lambert et Cointenel."

It appears to us from the foregoing account, that Charles IX. died of inflammation and suppuration of the left lung.

HENRI III.

This prince died from a wound inflicted by the knife of an assassin in the hypogastrium. He lived for about eighteen hours after the injury, and suffered from frequent fits of weakness, suffocation, fever, intolerable thirst, and the greatest agony. We

learn by the notes of the dissection, that a portion of the ileon was pierced through and through by the knife, and that the mesentery was also wounded in two places, with incision of its vessels. The contents of the thorax, abdomen, and head, were otherwise healthy.

HENRI IV.

The Alfred of France, Henry the Great, was stabbed in his carriage on the 4th of May, 1610: he died almost immediately, after uttering a few words and discharging blood by the mouth.

On the left side of the chest, about the level of the second and third rib, was a wound capable of admitting the finger; it ran on the pectoral muscle towards the nipple for the length of four inches, but did not penetrate the chest. Below this was another wound between the fifth and sixth rib, about two fingers' breadth, penetrating the thorax, piercing one of the lobes of the left lung, and wounding the trunk of the pulmonary artery, a little below the left auricle. There was much blood extravasated in that side of the chest, and both lungs were filled with.

LOUIS XIII.

This document is written in Latin, and grâces de Dieu such Latin, by the *doyen* or dean of the Ancient Faculty of Medicine, which, from the dissection of the present king downwards, has been required to assist at the mournful ceremony.

A circumstance is related of this Louis on his death bed, which is worth transcribing. "When," says the historian, "his physician, at his earnest desire, numbered the fleeting minutes that remained, and pronounced that his life could not exceed two or three hours; he received the intelligence with resignation and even satisfaction; and looking fervently up to heaven, added, 'Well! I consent with all my heart.' Here is the account of the dissection.

"Postero autem die (id est 15 mensis maii 1643), hora sexta matutina defuncti regis cadaver apertum præsentibus serenissimo principe ac domino de *Nemours*, marescalco sive castrorum præfecto primario; domino de *Vitry*, domino de *Souvré*, primo cubiculario nobili sive inter nobiles, regi à cubiculis primario, medicis regis ac reginæ primariis, aliis quoque medicis et chirurgis, ex *utraque* familia chirurgorum Paris... Atque in hoc regis cadavere ulcera plurima pure sania ac tabo manantia reperta sunt, variis partibus inusta, mesocolo intestinis omnibus crassioribus, sed unum colo extremo insederat, quod intestinum ipsum exederat et perforaverat, unde purulenta multa ex putrefactis prædicti mesocoli glandulis et vasis emanans et alvo inferiore coercita et cumulata trium librarum semisestariorum parisiensium mensuram implere poterat. Deprehensus quoque in rene dextro abcessus sed exiguus, et fermè nihil faciendus. In fundo ventriculi lientre abraso vicinis grandior et alii perexigui plures, et humoris fusci, fuliginosi atque ex viridi nigritantis copia insignis, quo, aut simili omnia ad unum intestina, usque ad extremum rectè referta erant.

"Vesicula fellea hepati subjecta et imis ejusdem partibus, affixa ab humore bilioso crassiore propè vacua. Hepar exsuccum planè ac retorridum.... *simile* quod et duriusculi contra ventrem lanabat et solvebatur in grumos. Pulmonis sinistri lobus, pleuræ firmiori adherens et affixus ulcere maximo et profundissimo, pure plurimo confertus, et putrefactus apparuit."

Louis XIII. would thus appear to have died of phthisis pulmonalis with ulcerations of the bowels.

LOUIS XIV.

This is a rather extraordinary dissection of an extraordinary being. At one time amongst the most fortunate of men, he was hailed as Louis le Grand, but before the close of his career he might have justly been termed Louis l'Infortuné. Born almost a fugitive, ruled by his mother Anne of Austia, who, in her turn, was beneath the thumb of the wily Mazarin; the education of Louis consisted almost exclusively in the study of the tragedies of Corneille. Hence that inordinate love of what the world calls glory, —hence that wanton waste of human blood

for a favourite object, which rendered this prince in some degree a type of the reckless Napoleon,—hence all his greatness, and all his reverses. He obeyed, exiled, recalled, and again obeyed Cardinal Mazarin; made war through his general, the great Turenne; gained many battles, but risked his life in none; rooted out heresy by missionaries to convert, and dragoons to enthrall; fell successively under the influence of Madame de Montespan, and Madame de Maintenon; lived a superstitious man, and died a brave one. At the age of 74 he was operated on for fistula, and although the result was successful, he never regained his accustomed spirits. He now lost his only son, and within a few short months, the Duke of Burgundy, the Duchess his wife, and their eldest son, were all swept away and laid in the same tomb. Misfortunes abroad and miseries at home, a weakened empire and a discontented people dashed the last years of the old king with care, and at seventy-seven the vanity and ambition of his manhood were nearly quenched. At length the inevitable hour approached, and his spirit rose as his feeble frame sank. "Why do you weep," said he to one of his domestics, "did you think me immortal?" Bequeathing good counsel with his dying breath, the star of Louis XIV. set for ever!

SECTIO CADAVERIS.—The whole of the left side of the body appeared gangrenous, from the extremity of the foot to the top of the head. The epidermis was generally detached from the cutis, the right side was gangrenous in several places, but less so than the left, and the belly was excessively blown up.

On opening the abdomen, the intestines, especially those on the left side, were found "altered," with some marks of inflammation; the large intestines were enormously dilated. In the left kidney was a small stone, similar to what the king had frequently voided during life, without any evidence of pain. The liver, spleen, stomach, and bladder, were healthy.

On opening the chest, the lungs were sound, as was the heart. The extremities of the blood-vessels, and some of the valves, were ossified; all the muscles of the throat were gangrenous.

On opening the head, the whole of the dura mater was found adherent to the cranium, and the pia mater had two or three *purulent spots* along the falx. The brain was otherwise healthy.

The left thigh internally was in a state of mortification, as were the muscles of the hypogastrium, and indeed this condition existed as high as the throat. The blood and lymph were *universally fluid* in the vessels.

The disease of which the king died, appears to have been an extreme degree of the gangrena senilis.

LOUIS XV.

After a reign of alternate benignity and cruelty, useful designs for the advancement of learning, and tyrannous measures to strangle freedom, conjugal fidelity in the commencement, and profligate debauchery in the sequel; Louis XV. fell a victim to his vices. He had been seduced from his queen by the allurements of some ladies of his court; had been weaned from them by by the avaricious and ambitious Madame de Pompadour; had abandoned her for the dissolute De Barré; and at length, when his jaded appetites ceased to be stimulated even by the meretricious arts of the latter, he resorted to mistress after mistress, and finally received his fatal malady, the small pox, from one who was infected with that disease. It was in this king's reign that the celebrated execution of Damien took place. No examination of the body of Louis was instituted, on the following singular, and somewhat ludicrous account.

The superstitious fears entertained regarding small pox completely drove the attendants in the palace from the body of the dead monarch. The first gentleman of the bedchamber, more faithful or more bold than the rest, demanded of Lamartinière, then chief surgeon, why he did not proceed to examine the corps, and added, that he *must* do so. "My Lord Duke," answered Lamartinière, with his usual *brusquerie*, your

office renders it imperative upon you to hold the head of the deceased during the process. I declare to you, that if it is opened, neither you, nor I, nor any one of those assisting, will be alive eight days afterwards." Need we add, that Monsieur le Duc said no more about the matter!

The seeds of the revolution which had been sown in the immoralities and arbitrary acts of the preceding reign, ripened into the unequalled horrors and atrocities of that of Louis XVI. With him the guillotine took the place of the scalpel, the executioner's report was substituted for that of the Dean of the Faculty of Medicine, the remains lay rotting in a lime pit, instead of reposing amidst the dust of Charlemagne and Henri Quatre, at St. Denis. Like the body of the Roman, it *vanished in the tempest!*

LOUIS XVII.

The son of the last king never ascended the throne of France, but died whilst young, in the durance of the regicides and revolutionists. That no foul play, at least no overt violence, was inflicted, the account of the dissection, and the respectable names of Dumangin, Pelletan, Lassus, and Jeanroy are sufficient guaranty. The document signed by these gentlemen purports, that in pursuance to a warrant from the Committee of General Safety, they repaired to a second-floor apartment in a tower of the temple, where they found the body of the son of the deceased Louis Capet. He *appeared* to be about ten years old, and was known to two of the subscribed, who had attended him for *some days* during life. They were told that he had died at three o'clock on the preceding afternoon, and putrefaction was commencing on the belly, the scrotum, and inside of the thighs.

The whole frame bore the aspect of marasmus; the belly was tense and tympanitic. On the inside of the right knee was a tumour without change of colour of the skin, and another smaller tumour over the os radius near the left hand. The tumour of the knee contained about two ounces of greyish matter, a mixture of pus and lymph, situated between the periosteum and the muscles; that over the radius contained matter of the same kind, but more consistent.

On opening the abdomen, about a pint of yellowish and very fetid sero-purulent fluid flowed out. The intestines were blown up, pale, adherent to one another, and to the walls of the abdomen, and studded with a great number of tubercles of different sizes, which contained the same description of matter as that in the external tumours. The omentum and mesentery were filled with "lymphatic tubercles" like the former, and others were dispersed over the peritoneum. The interior of the stomach and intestines, the liver, the spleen, the pancreas, and the kidneys were sound.

The lungs adhered universally to the sides of the chest, the diaphragm, and the pericardium, but their substance was sound and only a few tubercles were found in the neighbourhood of the trachea and œsophagus. The heart and pericardium were natural. The brain and its appendages were also sound.

The reporters add that the disease of which this unfortunate young prince died was evidently chronic in its march and scrofulous in its nature. It was chronic inflammation and tubercular affection of the peritoneum. How far the tender mercies of the Conseil Général and the Sans Culottes may have contributed to light up this scrofulous affection is more than we shall presume to determine. God keep us and our's from the nursing of the Robespierres and Marats!

We now come to him who, like the rod of Aaron, swallowed up the memories of all his predecessors; who combined the great qualities of Charlemagne with the military despotism of Sylla, the deep selfishness of Marc Anthony, and a taste of the bloody vindictive cruelty of Marius; who had almost the daring of Alexander and more than the military skill of the first Cæsar; who fought his way to the throne of the world like a gallant man, ruled it like a great man, and lost it like a weak one; we come to NAPOLEON BUONAPARTE. We

have already detailed so fully the particulars of his demise and his subsequent examination, that no necessity remains for our noticing them again. We could not, however, pass by this extraordinary being in silence, or draw a veil before his niche in our pages, like that black daub that blots out the person of Marino Faliero from amongst the Doges of Venice in the Palace of Saint Mark.

LOUIS XVIII.

No official account of the dissection of the last Louis has yet been published. The dean of the faculty, M. Landré-Beauvais, with those of the professors whose duty it is, were present on the occasion, and a notice of the particulars appeared in the Gazette de Santé, which has never been contradicted, and is therefore no doubt correct. The statement in question is thus prefaced:—"Although the procès-verbal has not been made public, we believe we may depend upon the accuracy of the following details."

SECTIO CADAVERIS. The bones of the anterior part of the skull were very thick, whilst those of the posterior part were thinner than usual. The brain was very large, but the left side was more developed than the right.

The lungs were perfectly healthy—the heart large, flabby, and empty of blood.

The stomach was very large, distended by gas and mucous matters, and it presented small red patches on its internal surface. The intestines were sound, but a steatomatous tumour of considerable size was found in the folds of the mesentery; it had occasioned no pain during life, and its existence had not been indicated by any perceptible symptoms. The other viscera were healthy.

The superior and inferior extremities were much wasted; the left thigh showed on its inner side the mark of an ancient blister. Both legs, from the knees to the extremity of the feet, were converted into a yellow lardaceous substance, in which the cellular, the muscular, and even the osseous structures were confounded. A knife penetrated easily into the bones themselves. The right foot and the small of the leg were sphacelated, the bones softened, and four toes had been successively detached in the progress of the gangrene. The left foot was sphacelated likewise, but only as high as the tarsus.

From these details it is clear that Louis XVIII. like his greater ancestor the XIVth. of the name, was destroyed by gangrene of the lower extremities. Whether the gastronomic indulgences of the late monarch had any thing to do with the event, is scarcely problematical; but certain it is that the state of the lower extremities amply justifies the sarcasm of the Parisians on the restoration, who represented Louis as entering the capital in the form of a fat porker. Peace to his manes, for they sleep the quiet sleep—

> In that deep vault
> To whose foul mouth no healthsome air breathes in;
> Where for these many hundred years, the bones
> Of all his buried ancestors are packed:
> Where he, the last, as yet but green in earth,
> Lies fest'ring in his shroud.

We must now conclude this article, and we may add that the little pains we may have bestowed upon it will be amply rewarded if it affords either instruction or gratification to any of our readers.

XLVIII.

DISTORTION OF THE FACE CURED BY DISEASE OF THE BRAIN.

Thanks to the ingenuity and perseverance of Mr. Charles Bell, the twisting of the side of the face produced by paralysis of the portio dura, depending on local causes, is now pretty generally understood. The distortion which this partial palsy produces is sometimes very frightful and always very odd, but we fancy that few patients, notwithstanding, would choose to be cured in the following manner.

"*Case.* A man, aged 36, about a year before his death, had a tumour extirpated from behind the angle of the jaw, on the left

side, and immediately after the operation, paralysis took place in the left side of the face, in consequence of which his mouth was distorted to the opposite side in a most extraordinary degree. About six months after this, he began to complain of headach, and giddiness, which often gave him the appearance of intoxication, and after some time these symptoms were followed by impaired vision, occasional strabismus, and a considerable degree of deafness; and at last by drowsiness, coma, convulsions, and death. As these symptoms advanced, he became affected with numbness, and loss of power of the right side of the face, which increased very gradually. During the increase of this, the distortion of his mouth gradually diminished, and for some time before his death, his countenance had become entirely symmetrical. Both sides of his face were now entirely paralytic, but with this difference, that on the right side, the feeling was also lost, while on the left, the feeling was entire.

"*Inspection.* In the centre of the middle lobe of the right hemisphere of the brain there was a tubercle about an inch long, and three fourths of an inch in breadth. At its lower part it was attached to the cerebral substance, but the rest of it was detached, being surrounded with dark-coloured pus. In the vicinity, there was increased vascularity with softening of the cerebral substance."—*Abercrombie, 2d edition.*

By the way, whilst writing of paralysis of the face, we may take occasion to remark the confusion into which authors have fallen, respecting the side on which this occurs in hemiplegia. Some have stated that the face and the body are affected on the same side, others the contrary. The fact is, that much variation exists in this respect, but we would be disposed to say, that the face and the body are most commonly paralysed on opposite sides. Thus, if disease exist in the left hemisphere of the brain, the patient will generally be hemiplegiac on the right side, but the portio dura will be palsied on the same side as the disease in the brain, and, consequently, not on the same as the body.

XLIX.

DR. MONRO ON THE MILT-LIKE TUMOUR OF MUCOUS MEMBRANE.*

So many years have elapsed since the first edition of Dr. Monro's work was published that many points which were noticed then will be feebly remembered, or perhaps entirely forgotten now. We shall refresh our readers' memory and our own by noticing such portions of this valuable volume as appear to us to be least generally understood. The section on what Dr. Monro has called the milt-like tumour of the mucous membranes appears to us to be in this predicament. Dr. Monro observes that this tumour, though resembling in some respects the "anomalous tumour" of his grandfather, or what is now commonly called fungus hæmatodes, differs from it in several leading particulars. The doctor gives first a description of the disease and then enumerates the points of distinction between it and fungus hæmatodes.

"This species of tumour generally attains so considerable a volume, as to fill, and even to distend to an unnatural size, the bowel within which it is contained, as I have seen in the case of the bladder of urine; but in other cases, the tumour grows from a part only of the mucous membranes.

"The disease does not prove speedily fatal; for I had occasion to attend a patient who laboured under it for two or three years.

"The milt-like tumour, in many respects, resembles the milt of fishes; it is of a pale red colour; and it also is nearly of the same consistence, but rather softer; has an irregular surface and is covered by a thin membrane, upon which there is a number of vessels filled with blood.

"This species of tumour very readily falls to pieces, and mixes in part with water, forming a turbid mixture; and it becomes somewhat hardened by being put into strong spirits. It adheres but slightly to the organ from which it grows, by a number of small processes, which insinuate themselves into

* Morbid Anatomy of the Stomach, &c. 2d Edition.

the thickened villous coat; after the tumour has been detached, the villous coat of the diseased bowel assumes somewhat of a honey-comb appearance, and it is besmeared with several drops of blood, derived from the vessels which supplied the tumour having been torn.

"The bowel from which such a tumour grows, betrays marks of inflammation externally; there is evidently an unnatural determination of blood to the seat of the disease, the blood-vessels upon the peritoneal coat, being not only larger, but also more numerous, than in the healthy state.

"The neighbouring lymphatic glands also participate in the disease, being much larger than in the healthy state; and they are filled with precisely the same milt-like matter. In a case which I had occasion to examine, the bladder was filled with the milt-like matter, and one of the lymphatic glands at the side of it had attained the size of the fist, so that I at first supposed there had been a morbid contraction in the middle of the bladder; but found, upon opening it, that there was no communication between the cavity of the bladder and the swelling connected with it.

"There is another peculiarity in the disease, viz. the emission of a very remarkable and offensive fœtor: the organ containing such a tumour is as much discoloured, and emits a fœtid smell, as the same bowel which had been exposed to the air for several days.

"The veins disturbed on the mucous membrane, in the vicinity of the tumour, are considerably enlarged and distended with blood."

The differences noted by our author between this and the "anomalous tumour" are as follows:

"1st. The anomalous tumour of my Grandfather differs in its situation, from the milt-like tumour; the former has been found in all the tissues of the body, the latter in the mucous membranes only.

"The anomalous tumour is sometimes connected with the periosteum, the capsular ligaments, especially with that of the hip-joint, the peritoneum, the liver, spleen, ovarium, and uterus, and with the albuginea and vaginal coats of the testicle; with the coats of the optic nerve, and sclerotic coat of the eye.

"In short, the anomalous tumour is not confined to any one texture, but is common to all; it begins as a distinct elastic tumour without fluctuation, and some parts of it feel harder than others. In its progress it bursts, and a soft dark purple-coloured fungous excrescence, which bleeds profusely, rises from the centre, and soon increases very rapidly in size.

"The milt-like tumour is much softer than the anomalous; before it bursts, it has not the same purple colour and firm elastic feeling as the anomalous tumour which Dr. BURNS has compared to a sponge tied up very tightly in a piece of bladder; and I have never observed any appearance of fungous ulceration of the milt-like tumour, nor the same inequality in the consistence of different parts of it, as in the fungus hæmatodes.

"The tumour is nearly of an uniform consistence in every part, and its lobes are not so distinct as those of the anomalous, which are separated from each other by membranes.

"The milt-like tumour is, in colour and consistence, uniform in every part; but the section of the anomalous tumour exhibits, in its parts, a different colour, and also a different consistence, some portions being as soft as brain, others as hard as the yolk of a boiled egg, and others like cartilage; besides, there are cavities, of different sizes and forms within the tumour, full of a fluid tinged with blood.

"The disease I have been endeavouring to describe, appears only in advanced life; but the anomalous tumour is, in many instances, a disease of infancy, of childhood, and of the meridian of life."

Dr. Monro details the particulars of an interesting case communicated to him, along with a preparation of the morbid parts, by Dr. Anderson of Leith. The disease was situated at the great end of the stomach,

and was accompanied during life by the ordinary symptoms of malignant disease of that organ; namely, sickness after eating, pyrosis, emaciation, disordered state of the intestinal canal. Dr. Anderson observes in his account of the case—"To me it appears an example of the medullary sarcoma, so well described by Mr. Abernethy."

Our author remarks that he had occasion to visit along with Mr. Allan, surgeon, a man who was afflicted with this disease in his bladder, and who for ten months before his death suffered the most excruciating agony, and was often convulsed. Dr. Monro's father also met with a similar tumour in the bladder many years ago. The following case is adduced as a good example of the milt-like tumour of the stomach.

Case. John Leishman, æt. 35, admitted into the Royal Infirmary of Edinburgh on the 22d of December, 1824, much emaciated and hectic, with a large tumour of a livid colour in the umbilical region. In the centre of the tumour was an ulceration, which discharged a foul greenish matter, and below was a second smaller ulcerated point; there was much inflammation and extreme sensibility of the surrounding integuments. He stated that for several years he had been addicted to habits of intemperance, and after a debauch he first experienced pains in the stomach of a few days' duration. In April, 1824, these became more permanent, but no distinct account of their nature could be obtained. Fourteen weeks before admission he was suddenly attacked with intense pain in the umbilical region, which in four days was succeeded by inflammation and swelling. Four weeks before admission the ulceration commenced, and since that time the pain had been relieved. He seems to have died in a very short time, for the next mention made of the patient is that of his

"*Dissection.* The integuments were removed, and, as it was discovered that the tumour had extensive adhesions, the whole mass was dissected from the abdomen, and laid upon the table. After removing the small intestines, the ascending and descending colon, the spleen and the kidneys, all of which were natural, the diseased structure, with its connections, became apparent. The tumour involved the stomach, liver, pancreas, duodenum, and the transverse arch of the colon. The stomach was laid open, and its villous coat presented a high degree of vascularity and thickening. Towards the pyloric extremity a number of vascular fungi were observed, and, on passing the hand under these, in the direction of the external orifice of the tumour, the finger passed through a sinuous cavity, and presented at the external opening. The tumour itself exhibited, towards its circumference, a cartilaginous structure, but its centre was sloughy, and yielded a highly offensive fetor. The liver was enlarged, and contained a number of circumscribed white tubercles, of the magnitude of nuts and walnuts, the texture of which was soft, and yielded a milky fluid on pressure. Similar tubercles, of less size, pervaded the mesentery and omentum. The cavity of the abdomen contained about two or three pounds of bloody serum."

In another case of milt-like tumour of the stomach, there were the following symptoms.—The patient's aspect was pale and he was emaciated; the abdomen was tender in the epigastric region; sometimes he vomited after every meal, but at other times there was no vomiting for two or three days; occasional diarrhœa, with tormina; pulse and tongue natural. The degree of pain attending fungus hæmatodes is, according to our author, greater than that accompanying the milt-like tumour.

So much for this remarkable disease of which we have never witnessed an example. We must confess, however, that the distinctions between it and fungus hæmatodes do not seem to us to be so broad and characteristic as Dr. Monro imagines. The appearances of the latter disease are not the same in every instance, no more are the symptoms. In one case there will be much pain, in another there will be little or none—frequently the patient is young, but he is also not unfrequently advanced in life—sometimes the progress af the disease is rapid, sometimes it is very slow. Again,

with regard to the local characters of fungus hæmatodes, we can say with confidence that we never saw two samples of the tumour that did not differ in some respects from each other. In one there is the hæmatoid appearance, in another there is not—in some instances the tumour is very soft, in others so firm as to approach, in a great degree, to the consistency of a scirrhus—occasionally the colour is dark, more commonly of brain-like whiteness, and so on. In the account of the case reported as a good example of the milt-like tumour of the stomach, the description of the circumscribed white tubercles in the liver answers exactly to that of the medullary disease of that organ. We mention these circumstances, not to throw discredit on the tact and discrimination of Dr. Monro, both of which he possesses in an eminent degree, but to inspire caution in the classification of these malignant diseases. We have before observed, and we need not go over the ground again, that even the two great varieties, scirrhus and fungus hæmatodes, evince a very marked disposition to run into and blend with one another.

CLINICAL REVIEW.

L.

HOTEL DIEU.

I. RHINOPLASTIC OPERATION FOR DESTRUCTION OF THE LOWER LIP.*

The rhinoplastic, or, as it is generally termed in this country, the Taliacotian operation is applicable, no doubt, to many more cases of destruction of the superficial parts, than of that most prominent feature of the "human face divine" to which it is adjudged par excellence. Sir Astley Cooper, we all know, healed a fistula in perineo by a flap from the scrotum, and Mr. Earle followed in Sir Astley's wake on a similar occasion and with similar success. M. Dupuytren has recently applied the same principle to the cure of the deformity and destruction produced by that horrible malady, the cancrum oris.

Case. A male child, 11 years of age, was attacked, about eighteen months ago, with cancrum oris, which destroyed the half of the lower lip of the right side, from the median line to the inferior border of the lower jaw, and a portion of the cheek to near the angle of the maxilla. On admission into the Hôtel Dieu, the loss of substance of the cheek extended very little above the level of the commissure of the lips, was bounded behind by the inferior border of the masseter muscle, and reached below to the lower edge of the maxilla, which was there in a state of caries. The left half of the jaw, which had lost the point d'appui that the symphysis naturally affords, was dragged inwards by the action of the muscles, so that the row of teeth on this side was applied to the arch of the palate. This portion of the jaw, however, continued moveable, and could be readily returned to its proper situation. The aspect of the child was disgusting in the extreme, the tongue in part hanging out from the centre of the chasm, in part adhering by its right border, which greatly embarrassed its movements; the saliva constantly running out; mastication very imperfect, and deglutition painful. The health, notwithstanding all this, was good, and the lad lived entirely on soups and soft food. He was anxious to be rid of his deformity, and promised to suffer any thing for that purpose. M. Dupuytren commenced by destroying the unnatural adhesions of the right side of the tongue with a bistoury; but the essential part of the operation remained behind, and required ma-

* Journ. Hebdomad. No. 56.

ture deliberation before deciding finally on the mode to be pursued. Two or three plans were suggested to the able Baron, but we shall only notice that which was adopted. The object was to remove a flap of sufficient size from the neck, apply it to the gap, and retain it in its new situation by the twisted suture. The operation was performed on the 31st of August.

Having traced with ink the dimensions and form of the flap, which he determined to procure from the lateral, superior, and steno-cleido-mastoidean portion of the neck, M. Dupuytren dissected it off, taking care not to wound the jugular vein. The edges of the excavation having been pared, the flap was twisted on the narrow band that still connected it with the parts in the neck, the edges placed in apposition with the newly pared ones of the opening in the cheek and lip, and both retained in due connexion by the employment of the twisted suture in five places. The sides of the integument in the neck were also reunited by three sutures, two little arteries which poured out their blood were secured, and no other dressing was employed. The operation was one of much delicacy and occupied a considerable time, but the little patient bore it with great courage.

All went on favourably till the 2d of September, on which day the flap had not lost its vitality, but was even suppurating at one or two points of its circumference. In the night, however, of the 2d or 3d of September restlessness and delirium supervened, and the patient tore away one of the needles which united the edge of the lower lip with the anterior portion of the flap. A separation between the two, for an inch in length and half an inch in breadth was the consequence, and adhesive straps were applied by M. Dupuytren to bring the parts together. Next night, the fever and delirium continuing, a second needle, uniting the base of the lip with the inferior anterior portion of the flap, injured and tore the parts, which in the morning appeared to be slightly sphacelated. Nevertheless the flap did not die, but had by this time contracted solid adhesions above and behind. On the 4th M. Dupuytren removed all the needles and maintained the necessary degree of apposition by adhesive straps. On the 5th the unfavourable symptoms had disappeared, and the flap adhered extensively and firmly, though portions furnished a little suppuration. The laceration in front became a simple hare-lip fissure, which might be, and in point of fact very shortly was, treated by the usual operation for that deformity by M. Dupuytren. It failed, however, in consequence of smart hæmorrhage and consequent disturbance of the dressings occurring on the following morning, and the hare-lip of course continued. On the 12th of October the union of the flap and neighbouring parts was perfect at all other points, its vitality was also perfect, the wound in the neck was quite cicatrised, and as the surgeon thought the patient would be better able to undergo the hare-lip operation when his system had been invigorated by time and fresh air, he was dismissed the hospital, and ordered to return at a future opportunity.

Had it not been for the accidental violence inflicted on the lip, it is more than probable that the union of the flap with the neighbouring parts would have been complete. As it is, the diminution of the deformity in this poor child must be very considerable, and the results of the operation are calculated to encourage the surgeon in the application and extension of the rhinoplastic operation to many cases, in which its performance is at present never dreamt of.

II. ENCYSTED HYDROCELE OF THE SPERMATIC CORD.

There are some in the profession who profess that they find no difficulty in the diagnosis of hernia, and look with an air somewhat bordering on contempt on those who are more honest or less fortunate than themselves. For our own parts, we must own that we have met with difficulties, and seen them occur to very able surgeons. It is well known, at least to those who know any thing about the matter, that encysted hydro-

cele of the cord has been a prolific source of error, and Pott and Cooper, the surgeons of some of our London Hospitals, and of the Glasgow Infirmary, with many others whom we might name in private practice have found to their cost that it was so. We have no intention of commencing a studied disquisition on the subject, or deploring, like Peter Pindar's pligrim,

"With outstretch'd bum and bended knees,"

the backslidings of our brethren or our own. We are glad, however, that a case and a clinical lecture from M. Dupuytren, will enable us to give that admirable surgeon's observations on this frequently obscure affection. We conceive that we are doing an acceptable service to the profession, by pointing out from time to time dangerous parts and holes in the scientific ice, into which the heedless may chance to tumble.

*Case.** A male child, about 12 years of age, had the operation of injection performed at the Hôtel Dieu in 1828, for common hydrocele of the left side. He was perfectly cured, but some months afterwards a small, soft, indolent, and fluctuating tumour appeared in the groin, opposite the external ring. It was considered to be a hernia and a truss was employed, but the tumour continued to increase, and the patient again entered the Hôtel Dieu in 1829. Opposite the external ring was a roundish tumour slightly ovoid, the size of a large pigeon's egg, commencing within half an inch of the ring, and terminating near the epididymis. Although pretty tense it communicated a sense of fluctuation, and the colour of the skin was unaltered; it was evidently transparent; received no impression during coughing; and, though capable of being returned into the inguinal canal, it appeared to be circumscribed and indistinct. From this assemblage of characters M. Dupuytren recognized an encysted hydrocele of the cord, and performed the operation of incision on the 13th of October. The patient for this purpose was placed upon his back, and an incision very cautiously made through the integuments covering the tumour. The subjacent layers of fascia or cellular membrane were then successively and carefully divided till the cyst was opened into, which was indicated by a jet of yellow serum. The opening was enlarged with the bistoury and scissors, the finger introduced into the sac to ascertain that it possessed no outlet, the contained serum entirely evacuated, and its cavity stuffed with lint in order to induce suppuration and granulation. Every thing succeeded as favourably as could be wished, and on the 20th the date of report, the wound was nearly cicatrized.

M. Dupuytren observes that very great caution is frequently requisite in forming the diagnosis between this affection and hernia. By making the patient lie upon his back we perceive that the tumour is roundish, circumscribed, isolated, and distinct from the intestinal canal and omentum, besides which it is transparent, and commonly is attended with fluctuation. In spite, however, of these characteristic symptoms the diagnosis is often extremely difficult, and M. Dupuytren has witnessed "hundreds of cases" which had been mistaken for hernia and treated with a truss. In one patient in whom this error was committed, the tumour being constantly pressed upwards had mounted along the inguinal canal, and acquired a very great volume in the iliac fossa. With regard to the treatment, M. Dupuytren believes that injection would be the best, were we always certain of the nature of the disease. If, however, by mistake, a hernial sac was injected and the stimulated fluid thrown into the cavity of the peritoneum, the consequences may be readily imagined. In a Parisian hospital where operations are seldom practised, injection was performed in two cases of hydrocele of the tunica vaginalis, in which the communication with the abdomen continued open. One patient escaped, but the other died of peritonitis. Whenever then the slightest doubt of the nature of the case exists, incision

* Journ. Hebdomad. No 58

must be practised instead of injection, and even this must be done with caution, lest the vessels of the spermatic cord should be wounded. In the present instance such caution was adopted by M. Dupuytren, partly for the reason already alluded to, and partly from the bare possibility of the existence of a hernia.

III. VESICO-VAGINAL FISTULA.

*Case.** A woman, ætat. 30, who was affected with vesico-vaginal fistula supervening on a long and difficult labour, applied at the Hôtel Dieu in the course of last winter, and was successfully treated by the actual cautery. Scarcely, however, had the urine ceased to flow through the fistulous opening when the patient left the hospital and returned to her usual occupations. For some time she went on well enough, but getting into a voiture one day in a hurry, she felt something suddenly give way, the cicatrix in fact burst, and the fistula with all its train of inconveniences was forthwith reproduced. She now returned to the Hôtel Dieu, with the urine flowing involuntarily through the vagina, but not constantly or always in the same degree; if making exertion, little was discharged, but when lying still, the flow was abundant, and on trying to make water, the greater quantity issued through the fistulous opening. On examining by the finger, the opening was felt at the neck of the bladder and on the right side of the vagina; on employing the speculum its direction was perceived to be transverse, and it was formed of two lips, the superior of which, when the patient assumed the erect posture, was depressed, and passing a little below the inferior completely closed the fistulous orifice. This sufficiently accounted for the cessation of the involuntary discharge of urine on the patient's standing up, and its re-appearance on her lying down, the superior lip of the fistula becoming in the latter position the posterior one, and no longer offering a barrier to this discharge. M. Dupuytren determined, under these circumstances to try whether the plan that had succeeded before might not succeed again; and on the 13th of October the operation of cauterization was performed.

The patient was laid upon her face across the bed, a pillow placed under her belly, and her thighs and legs allowed to hang out of the bed. The fistula was then brought fairly into view by means of the speculum, and the edges gently touched by a cauterizing iron raised to a white heat, and made in the shape of a French bean The pain and inflammation that ensued were relieved by a warm bath in the course of the day, and up to the date of the report no discharge of urine by the fistula had taken place.

"Vesico-vaginal fistulæ, says M. Dupuytren through the reporter, are not very uncommon after tedious labours, and constitute one of the most troublesome and disgusting infirmities to which the female sex is liable. The treatment generally pursued has been that recommended by Dessault, viz. the retention of a catheter in the urethra and the introduction of a plug of some kind into the vagina, in order to keep the edges of the fistula as much as possible in apposition.—This plan though sometimes successful, has more frequently failed, and is extremely tedious at the best. M. Dupuytren has employed the actual cautery in these cases for a considerable time and with great success. He prefers it on every account to the use of the nitrate of silver, and employs it in the following manner:—the patient is placed across the bed upon her belly, with a pillow or two beneath her to elevate the pelvis, and her lower extremities out of the bed and held by assistants. A speculum in two pieces and hollowed like a flute, is introduced into the vagina, and the fistula exposed to view. With a cautery shaped like a French bean, named by M. Dupuytren *cautère en haricot*, the edges of the fistula are lightly touched, so as merely to stimulate without destroying them. The swelling which succeeds this cauterization chokes up the fistula for the time, the urine ceases to escape through the aperture, and either cicatrization and obliteration are effected or the aperture

* Journ. Hebd. No. 58.

is much contracted in diameter. Two or three applications of the iron are commonly required, and in order to ensure the free discharge of the urine from the bladder during the process a catheter may be kept in the urethra. This, however, according to M. Dupuytren, is seldom required, and the operation has succeeded in a great number of instances at the Hôtel Dieu. The most favourable cases are those in which the aperture is longitudinal, the most unfavourable when it is transverse. In the latter, when accompanied with much loss of substance and a considerable communication between the bladder and vagina, cauterization will scarcely succeed, and it then becomes necessary to resort to other means.

We think the foregoing observations on vesico-vaginal fistulæ worthy the attention of our brethren. Before concluding this article, we may allude to a clinical lecture published by that active and intelligent surgeon, Mr. Earle, in a late number of our contemporary, the Medical Gazette.* The lecture in question was delivered on the case of a woman in St. Bartholomew's Hospital, affected with a very extensive vesico-vaginal fistula, supervening on a long and ill-managed labour. Mr. E. does not seem to be aware of the use of the actual cautery in such cases; indeed he makes no mention of the employment of the nitrate of silver, potassa fusa, or other means of stimulating the callous edges of the fistulæ, that have at various times been adopted. The following remarks deserve notice:

"In calculating the probability of success from any curative operation, much must depend on the situation and extent of the injury. When that portion of the bladder has perished which is situated in the triangular space included between the termination of the ureters and the commencement of the urethra, I fear no rational grounds of hope can be entertained of success, as the urine will flow through the fistulous opening as rapidly as it is secreted, and will effectually interrupt the healing processs. Again, when the opening is in this situation, there would be danger of cutting across the termination of the ureters in endeavouring to remove the callous edges of the opening.—This danger, and the difficulty of treating such a case, will be better understood by referring you to this preparation, and this drawing, which was taken from it when in a recent state. The subject from whom this preparation was removed was a young Irish woman, who came into the hospital in an advanced stage of acute peritonitis, and died the following day. She had been delivered one month, and had been attended by a drunken midwife, who suffered her to linger many days in labour, administering from time to time her favourite cordial to the patient and herself. In this case you will perceive that nearly the whole portion of bladder between the ureters and urethra has sloughed away. The bristles which are introduced into the ureters are seen immediately at the edges of the opening. It would have been quite impossible in this case to have affected any thing by operation. In this case you will likewise see the hernia of the mucous lining of the bladder, which is turned upwards, and is united to the neck of the uterus, just as I have described to be the case in the patient at present in the hospital. In the drawing the comparative vascularity, and other characteristics of the lining of the bladder and vagina, are clearly marked. In this case, also, you will observe that the mouth of the uterus has been closed by the inflammation which was produced. The uterus was distended with menstrual fluid, and it is probable that the peritonitis was excited by this obstruction, as there were much greater traces of inflammation over the pelvic viscera than in other parts of the cavity of the peritoneum. This circumstance reminds me that I had omitted to mention that in the case now in the hospital the patient has not menstruated since her confinement; but I have ascertained that there is no obstruction in the mouth of the uterus, by introducing a full sized bougie

* For Nov. 14th, 1829.

into its cavity. When the opening in the bladder is situated nearer the fundus beyond, or rather higher than the ureters, there is a far better prospect of success, as in that case there will be a cavity to receive the urine, which may be allowed to flow off through a short catheter as rapidly as it is secreted. The probability of affording relief even in such a case, must, however, depend on the extent of the opening, and the degree of eversion or hernia of the bladder; and here I would observe that this eversion of the bladder appears to depend on the greater destruction of the coats of the vagina in proportion to those of the bladder. In the process of cicatrization, where there has been a large slough of the vagina, the bladder is drawn out to supply its place, and becomes firmly united and continuous with the surrounding vagina. It must be confessed, that under the most favourable circumstances, these cases present the greatest obstacles, and are certainly the most difficult that occur in surgery. I do not mention this to discourage you from making attempts to relieve patients suffering under this great calamity; on the contrary, I would strongly urge you not to abandon them, and not to be deterred by many failures. I have succeeded in perfectly restoring three such cases; in one of which I performed upwards of thirty operations before success crowned my efforts."

The continual flow of urine, narrow space for operation, great sensibility of the parts engaged, and their disposition to slip from before the instrument, the impression made on the pelvic viscera by an accidental cough or sneeze, &c. and lastly, the great indisposition of mucous surfaces to take on the adhesive inflammation, are serious difficulties for the surgeon to contend with. Nil desperandum must be his motto, and to aid him in accomplishing the desired and desirable ends, Mr. Earle lays down the following directions:—

"It remains for me yet to state what curative and what palliative means we possess in these cases. When the opening is not situated between the urethra and ureters, or in the neighbourhood of the latter tubes; when it is not of great magnitude, and when there is not much hernia of the bladder, you may attempt to remove the callous edges, and unite them by the assistance of sutures. You will be much facilitated in this operation by previously dilating the urethra sufficiently to admit the fore-finger of the left hand; by which you will be enabled to draw down the bladder and to afford a support and resistance in removing the edges. The instruments best adapted for this purpose, are very narrow double-edged scalpels, or lancets, with which you may pierce through the membranes and cut your way outwards. These should only cut a short distance from the extremity. It will be better to commence at the extreme edges of the opening, and not to attempt to effect too much at any one operation. By several operations you will gradually diminish the aperture, but by attempting too much you will be foiled altogether. To enable you to convey a suture through the edges, to hold them in contact, it will be necessary to employ *port-aiguilles*, with grooves which will hold a short triangular glover's needle at different angles, and with slides adapted for holding or letting loose the needle. The following is the mode in which I have employed this:—An armed needle should be fixed at the angle most convenient for piercing the denuded edges of the wound, which should be directed by the finger, and carried through the two edges. The point should be received by the other *port-aiguilles*, and the slide pushed up to fix it. The slide of the first should then be drawn down, which will leave the needle in the grasp of the second, by which it may be drawn through with its thread attached. To effect this in so narrow a space as the vagina, is often most difficult, and requires much patience and dexterity. The ligature should be drawn tight, and the ends cut off. I have also employed short hare-lip pins, and the twisted suture; but these are still more difficult to pass, and cause much more irritation. In those cases which, from the situation of the opening, or its magnitude, no curative means can be attempted, a well-adapted truss, with an elas-

tic gum pad, will often enable the patient to retain a considerable quantity of water, and to enjoy comparative comfort."

Here we must stop for the present, and we again recommend our readers to peruse the observations of the French and the British surgeon on this very interesting, because very practical subject.

LI.

WESTMINSTER HOSPITAL.

I. MEDULLARY SARCOMA IN THE HAM—AFFECTION OF THE LUNGS AND LIVER.

Amelia Beckett, æt. 57, admitted, Nov. 3d, 1829, under M. Guthrie. States that two years ago, last month, she perceived a lump in the lower part of her left leg—hard, immoveable and free from pain, and is certain there was never any pulsation in it. The tumour gradually increased, and, two months afterwards, was about the size of a large orange, when a lancet was pushed into it, a little below the origin of the gastrocnemius, and a few drops of blood was the only result. She has at intervals suffered great pain from it—sometimes shooting through the swelling, extending down to the heel, accompanied with a tingling feeling in the sole of the foot and round the ends of the toes. About four months ago she had plaisters applied—then linseed meal poultices, and, lastly, fomentations. She describes herself as having been always healthy, and, previous to this disease, a strong stout-looking woman. She is now very much emaciated.

On examining the left leg, we find the whole limb edematous—pitting on pressure—a great and tense enlargement beginning in the popliteal space, just above the origins of the gastrocnemius, extending forwards and downwards on each side—rather flattened on the outside, more projecting and rounded on the inside; its origin is perfectly immoveable, and apparently unconnected with the tendons forming the ham-strings—it occupies the whole extent of the gastrocnemius. The veins ramifying over it are all distended, and in a varicose state up a considerable portion of the thigh—the tumour is hot, and at one or two different points has an elastic feel. The diseased leg is more than twice the size of the other—moderate pressure does not cause her any pain. She suffers considerably from a cough—her pulse is feeble and quick, and she is evidently much exhausted by the continuance of the disease. She is ordered fish and mutton chop, and a pint of porter daily.

It was evident that amputation offered the only chance of success in such a case as this, although it was more than probable, Mr. Guthrie stated, that the lungs or other internal part were affected, as appeared to be shewn by the cough and irritation under which she was labouring, and, if so, it would then be rendered unavailing. A consultation having been held, these circumstances were explained to the woman, who expressed her willingness that the operation should be done.

Mr. Guthrie, in proceeding to the operation, stated that there were some peculiarities in his method of performing amputation of the thigh which he should explain—1st. That he never applied the tourniquet, when assistants could be obtained, on whom he could depend, for compressing the artery against the pubis—he only made use of it when proper assistants were not at hand, because great opportunities of observation had convinced him that there was much less blood lost when the tourniquet was not employed; the strap very often interfered with the operation and prevented the necessary retraction of parts, as well as gave rise to other inconveniencies. The next point was, that the first incision should go through the fascia lata, the points of attachment to which running between the muscles on the outside and the posterior part of the thigh, were also to be divided, so that the skin, integument, and fascia might be drawn up by the assistant, without any of that tedious dissection of the skin backwards, which was as unnecessary as it was painful. Lastly, that in a very thin person, such as this, the muscles, after being divided, should be so far retracted, that three inches and a half, or even four inches of bone should be exposed before the saw should be applied, and which should always be held in a perpendicular direction.

The operation was performed on these principles in 80 *seconds*, two arteries only being tied. No blood was lost.

The patient bore the operation remarkably well, and appeared to be going on favourably for the first few days, when an irritative fever set in, with an increase of cough and expectoration, and she gradually sunk until the 14th day after the operation, when she died.

On the day succeeding the operation, the arteries and veins of the amputated limb were injected with wax, an incision was made from the popliteal space in the center, between the two portions of the gastrocnemius, into the tendo Achillis.

Immediately on getting through the fibres of the muscle a considerable quantity of yéllow pultaceous fluid escaped — probably about half a pint. On enlarging the opening and clearing it, it was evident that the knife had divided a tumour of considerable size, the left side of which was about double the size of the right—the upper portion was excavated and the cavity filled up by the curdy pultaceous matter, which was more fluid where the elastic spring had been felt during life.

The walls of the tumour were formed by a partly cartilaginous, partly lardaceous, substance, thicker in some parts than others. The popliteal nerve was increased in size, and passed under the tumour, between it and the bones, having been pressed upon by it, accounting for the pain experienced in the toes. Just as the artery passes down from the popliteal space, two arteriæ surales, nearly three times the natural size, were given off, passing along the outer surface, between the fibres of the gastrocnemius, and fulfilling the duty of posterior tibial and fibular arteries, which were obliterated. The internal edges of the tibia and fibula were both roughened, and in some degree softened, evidently the result of the pressure.

The post-mortem examination took place four days after death. On opening the thorax, the lungs were found to have several large tubercles in the different lobes, which, when cut into, showed the same white medullary-sarcomatous appearance evidently connected with the disease in the leg. The liver was also similarly affected. On tracing the veins up into the pelvis, they were found inflamed as far as the common iliac. A model of the leg, shewing the dissection of the tumour, has been made, and may be seen at the hospital.

II. ULCERATION OF THE URETHRA — EXTRAVASATION OF URINE — SCARIFICATIONS — DEATH.

George Huntley, æt. 1 year and 9 months, admitted December 2d, under Mr. Lynn. On Sunday last, Nov. 29th, the child cried on voiding its urine, and on Monday, at two o'clock, flinched and cried again excessively. The quantity voided was less than a cupful and passed in a full stream. On Monday evening he appeared to suffer great pain in making water, which was only expelled by drops. He was seen by a medical man and some medicine ordered—during the night the scrotum swelled—was red and tense, and the patient was restless and appeared to suffer much pain. On the Tuesday he was fomented, and the whole of the scrotum and penis scarified with the lancet: on Tuesday night and Wednesday morning he appeared in less pain.

Wednesday, Dec. 2. He has passed no water since Monday morning—the scrotum is distended, semi-transparent, of a pale lake colour, and evidently painful on pressure—bowels open. Mr. Lynn has made several punctures in the scrotum with the lancet, from which some fluid has oozed out. Fomentations ordered to be continued.

3d. Mr. B. Lynn endeavoured, by means of bougies, to find the orifice of the urethra, but without success—the prepuce is very much elongated, for it allowed the bougie to pass an inch and an half before it was stopped. About 6 ounces of urine were ejected during the attempt, and a small calculus, about half an inch in length and an eighth in thickness, pressed out of the urethra. Fomentations were ordered to be continued, and 3iss. of the ol. ricini to be taken immediately. He has passed a tolerable night and the flannels have a urinous odour. Bowels have been freely opened. The tongue is

clean—pulse very feeble. Scarifications repeated.

4th. Ulceration has taken place about half an inch from the end of the prepuce. The urine passes both through this opening and the end of the penis. The scrotum is distended, and at the lower part is assuming a deeper tint—the child seems more fretful and passed a restless night.

5th. The scrotum is looking better—the distension has in some degree subsided, and the urine passes freely by the natural orifice.

6th. Passed a very restless night—bowels confined—tongue dry — skin hot, shewing an attack of low fever.

℞ Pulv. ant., gr. ij.

Hyd. submur., gr. ij. ft. pil. st. sumend.

7th. He had a cretaceous mixture with xv. minims of tinct. opii, last night, as he was suffering from an attack of diarrhœa—he was in convulsions at one part of the night, and early this morning died.

The friends were averse to an examination—but the urethra and scrotum were opened—the urethra appeared to have been ruptured a little above the membranous portion. The cellular texture in the scrotum was in a sloughing state—the bladder was slightly diseased, but no calculus or gut found in any part of the passage or bladder.

III. COMPOUND FRACTURE OF SKULL, WITH WOUND OF THE BRAIN.

Thomas Sullivan, æt. 15, admitted Dec. 4th, under Mr. Guthrie. This patient was brought in this morning, having fallen 40 feet in height. He was in a state of insensibility, and, on examining his head, it was found much swelled at the posterior lateral part, and a wound, about two inches in length, extending across nearly in the direction of the lambdoidal suture. On passing the finger into the wound, an extensive fracture was felt in that direction, with considerable depression. His breathing was stertorous—pupils dilated and insensible to light — considerable hæmorrhage from the ear—pulse imperceptible—a tea-spoonful of brandy was administered at short intervals and he was somewhat revived, and his pulse was 140, very small, trembling, and intermittent—skin cold.

When Mr. Guthrie arrived he had vomited twice, and about a tea-spoonful of brain was forced out; his extremities were rigid. He immediately enlarged the wound by incisions in two or three directions—it was then seen that the fracture extended for several inches both forward and downward, and a large portion of the parietal bone was depressed and overlapped by the adjoining bone. This depression was relieved by sawing off the angles with Hey's saw, but it was now found that the fracture extended in every direction, having separated the mastoid process from the temporal bone, leaving space for the finger to pass between. All further attempts were, therefore, given up. The patient appeared relieved when the bone was raised, and lived until 8 o'clock in the evening. During the operation of raising the portion of bone, Mr. G. pointed out the use of an instrument which enabled him to draw up the depressed portion, so as to counteract the inclination it had to return, without making pressure on any other part. During the operation nearly a tea-spoonful of brain escaped out of the ear.

On examining the head after death, one side of the brain was completely beaten in, and a considerable portion of the substance lost. The brain was much injected, and there was no coagulum in the base. The fracture had extended into the base of the skull separating the petrous portion of the temporal bone, and stopping at the lesser ala of the sphenoid bone.

IV. PSORIASIS DIFFUSA.

Mary Macartey, æt. 14, admitted October 28th, 1829, under Mr. Guthrie. States that six weeks ago she was running and fell against a wall grazing the skin about the situation of the right trochanter major. This scabbed and peeled off after a time leaving large red and scaly patches. She had not observed any eruption before this, but says that during the succeeding fortnight she observed it spreading across the loins unattended with pain or any further inconvenience than a slight itching at intervals. She had no medicine or applications for it until she first attended at the hospital five days ago.

She has not yet menstruated; she had the small-pox when about three years old and the scarlet fever five years back. She has been out of health ever since—suffering from continued pain in the head attended with drowsiness. She has never before had a similar eruption—bowels have been generally in a confined state.

She is pale, thin, and altogether of sickly appearance. The whole of her loins—each side of the hips—her knees, left shoulder, and fingers of both hands are covered with large continous blotches—in some parts the skin is smoothed and red, except where it is divided in furrows, some of which are covered with whitish scales slightly elevated.

Pulse natural—tongue clean—bowels confined. Ordered warm bath to-night and the following medecine.

Pil. Hyd. c. Col. gr. x. ft. pil. ij. st sumend.
Haust. Purg. ℥ij. mane sumend.

31st. Rep. baln. tepid. et medicinæ.

Nov. 2. Bowels not freely opened.

℞ Hyd. Submur. gr. v.
Pulv. Jalapæ, ℈j. ft. pulv. st. sumend.

3d. Her bowels have been freely acted upon—she is ordered to take Liq. Arsen. ♏iv. bis in die.

6th. The eruption is spreading across her loins and shoulders—she continues the warm bath every other night.

9th. She does not improve—the skin is very tender and she complains of great pain in the head.—Bowels open—tongue clean—ordered to take the medicine three times a day, with ♏xv. of the Liquor Potassæ to each dose.

10th. Her head is much better—the eruption still seems spreading.

16th. Her general health is much improved—the eruption is much the same.

18th. The dose of the liquor potassæ is increased to xxxv. minims and vij. of the liquor arsenicalis three times a day.

23d. There is a decided improvement both in general health and the state of the skin, which is less tender—the scales also are peeling off.

28th. Continues improving.

Dec. 1st. All the scales have been thrown off—her hands, hips and shoulders have merely a red appearance left where the scales were—she is made an out-patient and ordered to continue her medicine.

V. DISEASED PENIS.

John Mills, admitted Nov. 7th, 1829, under Sir A. Carlisle.

This patient states that it is fifteen years since he first perceived any disease in the penis. It was at a time that he was leading a very irregular life, and he observed some little inflammation about the end of the penis, and after a time a difficulty in drawing back the prepuce. It appears he took very little care of himself, and at last he was unable to draw it back at all, and it has continued in that state ever since.

He also states that he had a discharge from the urethra, two years after the first commencement of the disease, and from not being able to wash the gland it became excoriated, and he thought the prepuce began to feel "horny."

He was in the hospital last year under Sir G. Tuthill for an asthmatic complaint, from which he has suffered for some years, and was then transferred to Sir A. Carlisle.

Mr. Harding's, the assistant surgeon, treatment tended to prevent the skin from closing in round the gland to which it shewed a great disposition—to effect this, pledgets of lint dipped in different washes have been introduced between the prepuce and gland, and twice the skin was divided so as to free the gland and lay it bare. It was then seen that the whole surface was covered by a hard unhealthy-looking sore, and that part of skin adjoining was in a cartilaginous state.

It had become quiet and tolerably free from pain, and the man was dismissed at his own request, thinking he might move about with it, without much inconvenience—he was however readmitted Nov. 7th. The disease in a very short time had much increased in malignancy—he had much difficulty in voiding his urine, and required a catheter to be passed once or twice each day—the urethra was diseased and much contracted for the first two inches. Amputation seemed to be the only resource, and after a consultation the patient readily consented.

Nov. 10th. Mr. Harding performed the operation to-day, by directing the skin to be drawn back towards the pubis, and then

carrying his scalpel perpendicularly down through the substance of the penis, about an inch from the pubis. An even surface was left, and on being allowed to retract, the skin extended well over the edges. Ligatures were put upon three arteries, and very little blood lost.

11th. He seems very easy, only complaining of the smarting when the urine is passed.

15th. He has been going on well—the stump has healthy granulations, and is gradually healing over. He is much troubled with an asthmatic cough—his appetite is not good, but his general health is decidedly improved. He is ordered cough mixture.

18th. There appears to be a disposition in the surrounding parts to contract over the urethra. A bougie is ordered to be passed every day. There is a slight inflammation in one of the testicles.

25th. The inflammation of the testicle has much increased. Hirudines xx. applican.—Haust. cathart. st. sumend.

29th. The testicle is better. The stump is going on well—the asthma distresses him much.

Dec. 7th. The stump has nearly all healed, but the skin seems to have contracted rather too much round the orifice.

MISCELLANIES.

LII.

LITERARY PROPERTY.

Dr. Gooch and Dr. Burrows.

Suum cuique.

When the article (VI.) on Puerperal Mania, in our last number, (p. 359—370) was actually passing through the press, and while the proof-sheet was undergoing correction, we received a letter from Dr. Burrows, complaining that several passages had been taken by Dr. Gooch from his work on insanity almost verbatim, and without any literary acknowledgement. Dr. Burrows pointed out several of these parallelisms, or rather plagiarisms, and one of the most striking of these will be found appended to our review, just at the end, page 370. It certainly did appear to us that such parallelisms could hardly be accidental, and we saw no reason why the literary spoliation, as it then appeared to be, should not be pointed out. We had not time to make an other enquiry than merely a comparison of the passages, and it never once occurred to us that Dr. Burrows, who so strenuously claimed property surreptitiously taken from him, was actually reclaiming that which he himself had taken, without acknowledgement, from the accused author! Yet such was the case. On our return to town, after an absence of some months, we found letters from Dr. Gooch, pointing out the identical passage claimed by Dr. Burrows, published ten years previously in his paper on Puerperal Insanity, in the Transactions of the College of Physicians. We immediately showed the parallelisms to Dr. Burrows, who handsomely and candidly acknowledged that he was entirely in the wrong, and that a circumstance pointed out in his work (the loss of his notes) was the cause of his attributing a plagiarism to Dr. Gooch, which Dr. Gooch never committed—but which, in fact, Dr. Gooch might fairly retort on Dr. Burrows.

For our own parts, we have no reason to accuse ourselves of acting improperly either in word or intention; and indeed Dr. Gooch has not reproached us with any thing of the kind. The parallelisms appeared too close to be accidental—and so they turned out. We trust that this will be a lesson to all writers, and more especially compilers, not to be so very positive about their literary property, when their memories are not sufficiently retentive of that which actually belongs to them.

LIII.

DR. JOHNSON TO DR. UWINS.

To David Uwins, M. D. &c.

My dear Doctor,

On returning from the Continent, a few days ago, I was much edified and amused by the perusal of your spirited man-

festo of the 21st of September, in which you have honoured me with distinguished notice. I am sorry, however, my dear doctor, that you have "changed trades," and that you have become, in your own elegant phraseology, a "*Fee*-sycian instead of an Editor of Books." Consider, my dear friend, how much MEDICAL LITERATURE will lose by this vicissitude, although yourself may be the gainer! You must have reaped a golden harvest in the *fee* trade, the day you wrote your celebrated manifesto, for you plainly tell the world that you were then "upon very good terms with yourself" — and truly your lucubrations prove it! You have wisely made up for the abuse of the LANCET, and the criticisms of the GAZETTE, by as deep a draught of self-adulation as ever was swallowed by man!

But, my dear doctor, how do you make it out that you and I have been "private friends and public enemies" for so many years? I assure you I have never been your "public enemy"—though many people suspect that you are becoming YOUR OWN. Neither can I, my dear doctor, lay claim, conscientiously, to the sacred title of "PRIVATE FRIEND"—for, except an occasional rencontre, on publication days, in Underwood's shop, I am not aware of ever having had any intercourse or communication with you in my life. Of this I am certain—that we have never "eaten salt" together—not even *attic salt*—for you were selfish enough to hoard that up in your own "REPOSITORY." You inform us, dear Doctor, that about fifteen years ago you applied to Mr. Gifford for permission to write a paper in the QUARTERLY REVIEW—that the permission was granted—that an Essay "on Insanity and Mad-houses" was the result—that the LORDS of the ADMIRALTY were delighted with the paper—that Mr. Gifford was in ecstacies—that even Mr. Murray "stated to your friend Mr. Underwood that the paper was so richly deserving of something beyond the *maximum* of common payment, that he purposed asking your acceptance of another ten pound note—*which purpose, however, he never put into execution*"*—and, finally, that Mr. Underwood was so dazzled with the splendour of your "paper' in the QUARTERLY, that he eagerly engaged you as Editor of the REPOSITORY. The tide of Fortune, my dear Doctor, was flowing almost too fast upon you, and you know that prosperity is much more difficult to bear than adversity. I fear that it was at this time that your head became giddy by the prospect of Murray's extra ten pound note, and Underwood's appointment to the dictatorship of the medical press! It seems also that it was about this period you and I became "private friends and public enemies," without any consciousness, on my part, of this curious amico-belligerent position, for I was far from the metropolis at the time, and had little idea then of ever being elevated to the distinction of public competitor with so renowned a writer and practitioner as David Uwins, M. D. of Buckinghamshire.

"Now, Sir, simultaneously with the new-editing of the REPOSITORY, did Dr. James Johnson establish a publication, which, *if my recollection serves me right, is called the* MEDICO-CHIRURGICAL REVIEW. I recollect distinctly saying to Underwood, *upon reading the first few lines of this publication*, 'you have nothing to fear—such writing and such mindless stuff as this certainly cannot do.'"

What an admirable memory, my dear David, you must possess! You not only remember the precise words of the prediction uttered *fifteen years ago*, but the very name of the worthless Journal on which the prophecy was expended! How Mr. Underwood must have chuckled at hearing this

* "Should these lines reach Mr. Murray, (says the Doctor,) and he be disposed to discharge all his debts of honourable intention, he may yet hand to me, *without fear of affront*, this contemplated bonus." The keen-sighted bibliopolist, of Albemarle Street, will not fail to ask the worthy Doctor why he allowed Mr. Underwood to live 15 years without ever appealing to his testimony—and why he made the ten pound appeal directly after the amiable witness was no more! Certes this hankering after the "debt of honourable intention" is in sad keeping with the flourishing state of the fee-trade, as described by the Doctor himself.

consolatory fiat from the great stipendiary writer on "MAD-HOUSES" in the Quarterly! Pray, my dear Doctor, did Underwood also beg your acceptance of an extra ten pound note on this occasion? You hesitate to answer—well! how did the prophecy ["this certainly cannot do"] turn out? Yourself shall tell.

"It *did*, however, *do*, and it is a curious fact in the history and philosophy of periodical literature, that a Journal [the Monthly Medico-Chirurgical) was for a long time kept up without paying its expenses, which, in conjunction with Dr. Johnson, was conducted by two men (Drs. Shearman and Shirley Palmer) far, very far his superiors in every thing, while his sole and almost unassisted management of a book, which I should have thought no man of taste could have tolerated, procured fame and property to him. *Oh Templa! Oh Moses.*"

Now, my dear Doctor, the inference from the above must be, either that the medical public or yourself was in error for fifteen long years. That it was the profession which judged wrong there can be no doubt, for we have your own authority and assertion that *your* productions are characterised by great indications of talent—witness the following passage.

"When my book came out, called 'COMPENDIUM OF MEDICAL THEORY AND PRACTICE,' which I assure you, Sir, is a work of *no mean merit*, Dr. J. found fault with the style, &c.!" O fie, Doctor! how came you to let this little piece of intelligence come to light in conjunction with the following eulogy on myself?

"This same Dr. Johnson is not only no writer himself but no judge of writing. Even Dr. Johnson, poor and feeble-minded as we know him well to be, could not have been *so blind to worth as his remarks on my little work would argue him to be*, were there not some other little items to be taken into account."

I am distressed beyond measure, my dear David, that you should, even now, suffer severe qualms of conscience, and that on my account. It appears that, while editor of the MEDICAL REPOSITORY, you admitted '*a laudatory review of one of Dr. Johnson's publications.*' So so! Now this review must either have been avowed, or it was anonymous. If the *former*, I beg, my dear David, that you will unburthen your conscience, and throw the responsibility of the laudatory critique on the proper shoulders. This is the fair, open, and manly part to play with author and public. If, on the other hand, the laudatory REVIEW was *anonymous*, your conduct in publishing it, explains fully a candid passage in your celebrated letter, "I am afraid I handed it (the MEDICAL REPOSITORY) over to my learned friend Dr. Copland, *not much improved in value.*"*

You tell us, my dear friend, that this epistle of yours to your own hebdomadal (at least you are one of the reputed editors) was penned *in the evening*, and that next morning you read it, at breakfast, to your "young wife," who pronounced it to be a very "able" production, but hinted a fear that some reprisals might be made by the objects of your pointed wit and biting sarcasms. I wonder your sensible spouse, my dear Davy, did not suggest the doubt that such lucubrations as these would excite a suspicion in the public mind either that you sacrificed rather too freely, after dinner, at the shrine of Bacchus—or that all was not right in the upper story—namely, that you were lightheaded. I, indeed, and other of your private and intimate friends, could certify that not even your neighbour Mr. Abernethy is more abhorrent of the Tuscan grape than yourself—while the whole circle of your acquaintance could vouch for the

* As laudatory reviews can only proceed from the author's themselves, or from friends that are instigated by the authors or publishers, the statement of Dr. Uwins above-mentioned implies an imputation on the conduct of Dr. Johnson, which *must be cleared up.* Let Dr. Uwins state, either publickly or privately, the name of this laudatory reviewer, and Dr. Johnson pledges himself to prove that the said review was a most disinterested action—for of the writer he knows no more than he does of the "man in the iron mask," or the "man in the moon."

solid structure of your ATTICS. But still, my dear Doctor, as the public often form their notions of a man's sense and judgment from the tenor of his writings, and as yours are by no means calculated to further the prosperity of the *fee*-trade, to which you say you have so *very recently* taken, I would seriously advise you to look after your patients in Bedford Row, rather than exhibit yourself as a literary Merry Andrew—

"Frisking beneath the burthen of three score."

and inditing long nocturnal reveries—with your young wife's morning comments, which can only draw upon yourself and your partner the derision of that public to which you appeal.

As a "private friend" I offer you this advice, my dear Doctor, from a thorough conviction that its adoption will be beneficial to you—as a "public enemy," you may bear in mind the adage—

"Fas est et ab hoste doceri."

Your's truly,

JAMES JOHNSON.

Dec. 10th, 1829.

LIV.

THE LATE DR. JOHN ARMSTRONG.

"Nothing extenuate, nor aught set down in malice."

On Saturday, the 12th Dec. 1829, MEDICAL SCIENCE lost one of its most zealous and talented cultivators, in the person of Doct. Armstrong—cut off in the prime of life, (46 years of age,)—in the spring-tide of professional estimation and emolument—a successful practitioner, an applauded teacher, a generous rival, and a kind friend! That Dr. Armstrong had enemies, is not to be wondered at. Envy is—

"A shade that follows wealth and fame,"

and could no more fail to pursue Dr. Armstrong than his own shadow in full sunshine. In none of his printed works did he ever retort upon his enemies individually, or use a single harsh expression towards any of his contemporaries—a fact that authorises the epithet (generous rival) which we have applied to him.

The first appearance of Dr. Armstrong's work on Typhus Fever, in 1816, led us to bestow a warm encomium on the merits of the book and the talents of its author—and since that period, we have not ceased to do justice (we trust) to the abilities of a physician who was our competitor and contemporary—but to whom we never owed a single obligation beyond those arising out of common friendly intercourse. We have been accused, however, of over-rating the talents and lauding too highly the merits of Dr. Armstrong—and we may have done so—for, "to err is human;" but now that the subject of this notice has gone to eternal repose; when all living ties are dissolved, and all feelings of friendship, fear, envy, gratitude, or jealousy (if they ever did exist,) are left to a free course, we have no hesitation in reiterating our first and our last sentiments respecting Dr. Armstrong when alive.

1817.

"To the author himself (Dr. A.) we beg leave to offer our sincere congratulations on his valuable performance. Excepting in the perusal and delineation of Dr. Parry's ELEMENTS of PATHOLOGY, we have not for many years, derived so much pleasure in our analytical labours, as in the course of the present analysis. For the talents bestowed on Dr. Armstrong by Nature—for the experience gained by time—for the facts and observations treasured up by industry, he is accountable at the tribunal of humanity and the shrine of science.—*Medico-Chirurgical Journal, Vol. 3, p. 124, Feb.* 1817.

1828.

"Dr. Armstrong's works on Typhus, &c. which appeared some ten or twelve years ago, procured for their author a reception and patronage from the professional and general public, such as have never before been witnessed or experienced in the annals of medicine. From being a successful author, Dr. A. became, in a very short time, one of the most successful candidates for private practice, in this great metropolis, whither he came a total stranger—and, from a successful career in practice, he turned his attention to medical tuition, where he quickly drew a

larger class of students than any other physician in London. Some people may say, this was all good fortune—or chance. But we have an idea, that to take such a lead in three different and difficult walks of the profession—writing, practising, and teaching—requires something more than the chapter of accidents, the patronage of friends, or the caprice of fashion."—*Med. Chir. Review, Vol.* IX. *p.* 347, *Aug.* 1828.

Thus, then, we have uniformly and steadfastly advocated the talents of Dr. Armstrong, from his first appearance on the stage (after the establishment of this Journal) up to the year before his death; and a review of his conduct does not induce us to alter our published opinions. As we said above, we may have *over-rated* Dr. Armstrong, but we do not think that our estimate of his talents was very false. In what way, we ask, can a physician's abilities be estimated, but, by the general sense of his professional brethren! Now, Dr. Armstrong came to London in 1817 or 18, on the sole faith of the reception which his work on TYPHUS had experienced from the periodical press; and without any extra-professional patronage. In ten or twelve years he advanced to a private practice of four or five thousand pounds per annum, and he established the largest medical class in London, by lectures which were listened to by multitudes of applauding students, and reiterated in the periodicals of the day. His works have been republished in America, and they have been quoted with approbation by authors of repute in every country. We say again, that all this could not have taken place, except by a very general sense of his merits diffused among the medical community at large.

Every one knows that the usual practice of mankind is to decry talent while living, and extol it to the skies when its possessor has paid the last debt of Nature.

> "All human virtue, to its latest breath,
> Finds envy never conquered but by death,

Not having followed the usual example of mankind in niggardly with-holding approbation of the living, (when approbation *is of any* use)—we shall not imitate the other *part of* man's conduct, by heaping eulogies on the tomb, when the spirit is fled far beyond the reach of insult and adulation.

> "Can Honour's voice provoke the silent dust,
> Or flattery soothe the dull cold ear of death?"

Many circumstances conspire to render it almost impossible for an exact estimate of a physician's public writings, or private character to be formed, or, at all events, proclaimed during his life. The interests of science and of humanity, however, demand that TRUTH, divested of the panegyric of friends or detraction of enemies, should be established, when the individual has passed that bourn, beyond which the trumpet of FAME can never push its loudest note of good, or of evil report!

Having then, for a long time, bestowed our humble mead of approbation on the *published writings* of Dr. Armstrong, we shall now offer a few remarks on the *professional character* of the man himself; remarks which for obvious reasons, could never be made but in a post-obit biography. We trust that our past and present conduct will prove that we have acted up to the spirit of the motto at the head of this paper.

We venture to assert then, that the lamented physician, whose premature death has called forth this notice, was indebted to nature for splendid talents; and that he would have equally distinguished himself had he embraced any other department of literature, science, art, arms, or politics, instead of physic. That his original education, both classical and medical, was very scanty, he was neither ashamed nor afraid to declare to many of his friends, and on many occasions. His natural abilities, and his habitual industry soon rendered this primary defect a mere speck, that was scarcely discernible, and of no material consequence in the cultivation of medical science, where personal observation forms almost the whole circle of knowledge.

An acquaintance of eleven years with Dr. Armstrong, induces us to aver that the distinguishing feature, the prominent character of his mind, and that to which he owed a great deal of his successful career, was an ARDENT AND MOST PROLIFIC IMAGINATION. While reading his works, or listening to his discourses, one would be tempted to consider

him as entirely devoted to practical facts and observations, without any addiction to theory. Yet we have seldom known a more speculative physician engaged in actual practice. At the very commencement of his career in London, his mind appeared stored with, and he could pour forth in profusion, such a mass of observation and experience, in explanation of any phenomenon, or in illustration of any doctrine, as could hardly be collected by the most careful observer, during a long life of professional avocation. This resulted from an ardent and prolific imagination, multiplying deductions beyond all proportion to facts, and combining or arranging these deductions in the mind, till they appear to the individual himself, and even to those around him, as a vast magazine of experience, which it would be unreasonable to doubt and difficult to oppose.

It was the same fertility of imagination that led to another remarkable trait in Dr. Armstrong's professional character, mutability of doctrine and opinion. Where deduction is exuberant in such a science as that of medicine, fallacy must be frequent; and the detection of error, by so acute and candid a mind as Dr. Armstrong's, would naturally lead to change of principles, and even of practice. Those, on the other hand, who are slow and cautious in drawing inferences; who allow facts to multiply and accumulate largely before they attempt to construct doctrines or principles, are not so liable to those fluctuations of opinion that lessen our confidence in the judgment, though they enhance our admiration of the candour of those who proclaim them.

To the very same propensity towards exuberant deduction from fertility of imagination, is to be attributed the eloquence of Dr. A. in his lectures, and the persuasive force of his arguments in conversation. It was quite impossible to bring him into any difficulties by force of argument. His resources were inexhaustible, and he overpowered his opponent with hosts of facts and observations, which could not be parried or paralleled.

The vacillations of doctrine, so conspicuous in Dr. Armstrong's writings and lectures, necessarily led to mutations of practice in the treatment of diseases. A stranger who had just perused his admirable work on typhus fever, where blood-letting, calomel and opium, purgation, &c, are so boldly prescribed, would have been astonished to see Dr. Armstrong a few years after the publication of his work, confining his measures to the exhibition of cold-drawn castor oil. Those who were best acquainted with Dr. Armstrong's private practice, can testify that he became not merely a cautious, but, in many respects, a timid practitioner.

The public declaration which this talented and ingenuous physician lately made, of his change of creed in respect to contagion, caused a strong sensation, in medical society; and many of his best and ablest friends came to the conclusion that, on this point at least, a widening circle of experience tended rather to bewilder than clear the judgment. Dr Armstrong began to see that this mutability of doctrine would prove, sooner or later, destructive of professional confidence in his practice; and, for the last two or three years of his life, he indulged less freely in the expression of his opinions, at least, in conversation.

Such were the chief, perhaps, the only defects or failings in the professional character of Dr. Armstrong. They were amply compensated by talents of the highest order, and dispositions of the most amiable nature. His industry, we think, has never had a parallel, and there cannot be a doubt that his mental and corporeal exertions, in preparing and delivering lectures, while carrying on an extensive practice, contributed much to undermine his health, and accelerate his death.

The career of success which the subject of this notice experienced during twelve years' residence in the metropolis, has never been equalled, as far as we are acquainted with the annals of medical men, in this or in any other country. His success, we have some reason to believe, has been nearly the ruin of several of his brethren, who were tempted to bring their talents into the great mart of London, on the strength of Dr. Armstrong's rapid advance in fame and fortune—but whose prospects were blighted.

by withering neglect, and ended in total failure It is very well known that Dr. Armstrong came to London from Sunderland (in the beginning of 1818) with little or no patronage, and without having acquired more than a very moderate share of professional reputation in the scene of his first practice. His work on Fever, however, was in the course of a very flattering reception, and a vacancy in the London Fever Hospital, seemed to open a fine field for talent, and point at once to Dr. Armstrong as the person best qualified to cultivate that field with honour to himself and advantage to the public. Here one of those events which often determine a man's good or bad fortune through life, occurred, and seemed to threaten the very existence of his professional character! The canvas having commenced, Dr A. repaired to the College of Physicians, and presented himself for examination and a license. He was rejected! The crisis of his fate was at hand—and he must have been gifted with second sight who could augur any thing but utter ruin from the astounding decision in Warwick-lane! The event of this apparent disaster affords a memorable example of the good which not unfrequently springs from evil. Nothing but a strong reaction in the public mind, against the fiat of the College and in favour of the rejected candidate for a license, could have saved Dr. Armstrong from total ruin That reaction instantly took place. He was elected physician to the institution, with the full knowledge of his rejection by the censors appointed to test his medical knowledge—and a great many of the general practitioners in London, to their honour, took Dr. Armstrong's part, and materially promoted his introduction into private practice!

The mysterious rejection at the College has never been cleared up. That the censors, who were all men of honour, conceived that Dr. Armstrong was unfit to practice in London as a physician, until he had acquired more medical knowledge—or more knowledge of Greek and Latin, there can be no doubt—but the event falsified their decision—for not one of their learned body, *whether fellow* or licentiate, has, since that period, acquired half as much fame or emolument, as the rejected Armstrong!

Considering how often and how long the most splendid talents, the most extensive acquirements, the most unwearied attention, and the most honourable conduct, are destined to pine in the shade of this modern Babylon, there cannot be much doubt that the apparently sinister event just alluded to, was the basis, or, at all events, a most powerful auxiliary to the brilliant but short career which marked the path of him who now lies tranquil in the tomb! That his genius and industry—his mild manners—his amiable dispositions—and his zeal in the cause of humanity, science, and truth, would ultimately have surmounted every obstacle opposed to the rise of merit even in such times as these—and especially in such a metropolis as London, we believe—because, to all the foregoing qualities and qualifications, Dr. Armstrong added consummate TACT, and worldly wisdom, so that no man ever turned the favours of Fortune or the fruits of labour to a better account than he did—and that in the modest but attractive garb of simplicity and humility. Still we may safely conclude that, had it not been for the reaction in Dr. Armstrong's favour, occasioned by his rejection at the College, his professional path would have been rougher, and his progress slower than it was.

Be this as it may, it was not until within these seven or eight years, that his practice extended beyond the sum of two thousand pounds per annum. With this ratio of advancement, he was not satisfied, and he turned his ardent and active mind to the construction of a course of lectures, which are now before the public, and the success of which is well known. The celebrity of the man—the matter of the discourses—the animated and eloquent manner in which they were delivered—and the practice of elucidating diseases by numerous drawings and preparations, soon drew together a class of students far more numerous than that of any other medical teacher in this metropolis.

Dr. Armstrong's penetration had early led him to perceive that medical tuition, when at all successful, is one of the most powerful and permanent means of acquir-

ing, extending, and securing medical practice. The mind of youth is naturally grateful as well as susceptible; he is easily carried away by the lessons of his preceptor—imbibes his doctrines and ideas—and forms a kind of filial affection in return for early instruction. On all subsequent occasions, he not only consults his master in the moment of doubt or difficulty, but recommends him to his patients.

We believe we assert no more than the truth, when we say that the publication of Dr. Armstrong's lectures did not enhance his reputation among the higher orders of the profession, who were best judges of their merits. No man, however superlative his talents, however unlimited his acquirements, need expect to shine in the whole circle of medical science, embraced in a coure of lectures. He then loses the advantage of concentrating his powers towards a single subject—and necessarily becomes a compiler—the retailer of what others had said, done, and thought before his time. Dr. Armstrong's lectures, with all the pains which he had taken, were very different compositions from that of his work on typhus. Nevertheless, they extended his name and fame among the great mass of professional and extra-professional society—they increased his practice—and they brought him in a very considerable revenue.

The tide of prosperity had now floated him triumphantly over all the shoals and quicksands on which so many are stranded—and was carrying him steadily and rapidly forward to fortune and independence, with every rational prospect of providing for a large and beloved family. But it was quite evident to all who saw Dr. Armstrong, that he was over-working himself—and that the WEAR and TEAR of his preceptorial and professional avocations was far too great for the constitution to withstand for any length of time. The habit of lecturing, in such a place as the Borough, in Summer as well as Winter—the inhalation of putrid effluvia during the examination of morbid parts—the fatigue and anxiety of an extensive private practice—and above all the great, the dangerous, and, we may add, the unnecessary excitement into which he worked himself during the delivery of almost every lecture, were sufficient to consume the frame of a Hercules—and much more a frame in which already lurked the germ of a fatal malady. Dr. Armstrong never exhibited the marks of a sound, or at all events, of a strong constitution. He was susceptible of colds, and often affected with cough, which was, as is usual in such cases, attributed to mere catarrhal affection of the mucous membrane. During the last 18 months, however, the pulmonary affection assumed a more formidable shape, at least in the eyes of his friends—and during the Summer of the year just ended, he was obliged not only to desist from lecturing, but to retire into the country for change of air. He went first to Dorking, then to Worthing, and afterwards to Dorking again, whence he returned to London about the end of August or beginning of September, apparently improved in health, and to use his own expression, "quite well." But the cough had never entirely ceased, and he was considerably emaciated. He went down in September to the North of England, his native country, and returned in October, very much altered for the worse. The prominent moral character of phthisis shone forth in this talented physician as strongly as in the most unlettered peasant—utter incredulity as to the nature of the disease!

Dr. Armstrong would not admit, for a moment, that there was any serious disease of the lungs in his case—and we believe that a gentleman with whom he was closely connected, got into some disgrace by saying that "Dr. Armstrong himself began to admit that he was consumptive." So sanguine was this amiable physician of recovery, that even in the month of November last, he took considerable pains to counteract the above report, and authorised several of his friends to contradict it on his own special authority—declaring that he had never entertained or expressed such an opinion as to his own case.

Whatever danger might have accrued from this confidence of security at an earlier period, before the malady had made progress, and when many of the exciting causes might have been avoided, it was now per-

haps "a blindness to the future wisely given"—since phthisis had actually advanced almost to the last stage! Still Dr. A. continued to go out in his carriage, till within ten or fourteen days of his death, which took place, without a struggle, on Saturday night, the 12th December, in the 46th years of his age!

The emaciation was such that no person could have recognized the countenance of the living in the dead body! On examination, an immense excavation was found in the left lung, capable of containing a man's fist, with tubercles and adhesions in the same side. The right lung, especially towards the summit, was studded with tubercles, some of them very hard, others beginning to soften down.

Thus has terminated the short but brilliant career of one of the most talented and amiable physicians of the present century! We, who have been his warmest advocates through life, have freely expressed our opinions respecting his defects, now that the tomb has closed over his mortal remains—while those who denied him any merit while alive will probably overwhelm his memory with unbounded praise! If it be asked why we did not proclaim our opinions respecting the failings of Dr. Armstrong before his death, we answer—*first*, we did not choose to injure the *living*, supposing that it was in our power so to do—*secondly*, we cannot injure the *dead* by any thing that we now may say—and *thirdly*, we may benefit the *living*, full as much by pointing out the failings that are to be avoided, as the virtues that are to be imitated in a public character.

The short but eventful life of Dr. Armstrong, is capable of furnishing a useful moral lesson to his brethren left behind. We do not believe, indeed, that moral lessons drawn from the dead, make any very lasting impression on the living. The passions of the present soon overcome the precepts of the past, and thus we find man running the same giddy round of ambition, pleasure, avarice, love, and other human impulses, with little or no reference to the dangers into which their predeccssors had fallen in the same course. The members of the medical profession, however, are a thinking people, and we believe that the premature death of one of their most distinguished contemporaries, may afford them wholesome food for a moment's reflection.

Dr. Armstrong, in the garb of humility itself, was one of the most ambitious physicians of the age or country in which he lived. By the word "ambitious," we mean to cast no stigma on his character,—quite the contrary. His was that laudable ambition which carries men to the head of their profession, whatever it may be, and without which they never can rise beyond mediocrity. But that very ambition, laudable as it was, destroyed his life! Had he aimed at less, he would have accomplished more. the wear and tear of mind, occasioned by the compilation of his lectures, gave the first shock to his health; the incessant excitement into which he was ever worked by the delivery of those lectures, together with the exertion of voice inseparable from such delivery, brought into activity those dormant germs of phthisis which he carried with him perhaps from his mother's womb. Had this talented physician been contented with the fine and prosperous gale with which he sailed during the first few years of his career in London; had he allowed himself some relaxation, and fresh air every Summer, instead of wearing himself out in the mephitic atmosphere of the Borough, he would, in all human probability, have now been in as good health as when he first approached the metropolis. That he had always tubercles in his lungs there can be little doubt, from the immense number of these bodies found after death, and the state of induration in which many of them existed. That they should have been called into rapid and fatal activity after the age of 44, without strong and unusual exciting causeses, is contrary to all human experience and reasoning. These extraordinary causes, we conceive, are clearly referrible to the excessive wear and tear of constitution in the diseased's case, aided by the inordinate excitement and exertion of the respiratory apparatus, resulting from lectures carried on during all seasons, in different localities and sometimes more than once or twice in the same day! In fine, we have not

the slightest doubt that this amiable and highly gifted physician, fell a sacrifice to the attempt at undergoing a greater amount of intellectual and corporeal labour, than any constitution, or, at all events, his constitution could sustain without inducing premature decay! This may be a lesson to those few of his surviving brethren, on whom public fame, and, what is usually considered their lucky stars, have thrown the weight of extensive practice. Let them remember that the human machine, moral and physical, has its range of action, beyond which it is not quite safe to urge its speed!

"All men think all men mortal but themselves."

Yet a day comes at length, when the finest mind, the firmest nerve, and the toughest muscle, refuse to obey the most urgent call that can be made on them by the thirst of ambition, or that last of passions, the love of gold!

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LITERARY NOTICES.

In the press—"The Physiology of the Fœtus, the Liver, and the Spleen." By G. CALVERT HOLLAND.

A gentleman proposes to publish a work, entitled "Analecta Medica, or Gleanings from the Portfolio of Iatros," which will comprise an analysis of the practical matter contained in the greater number of the *medical* works that have been published in this country during the last thirty or forty years. To this undertaking he has been prompted, as well by a persuasion that such a work is much wanted, by a large proportion of the profession, as by the circumstance of his possessing a very large mass of materials, occupying no less space than fifteen thick quartos, the labour of his own pen, and the result of the habit of analyzing, for his own private use, in the course of perusal, the works which have fallen in his way. From this source he proposes to select and arrange, under proper heads, the most useful portions, divested of every thing of a speculative character. The plan will not embrace, for obvious reasons, several of the more recent standard works on the practice of medicine, nor several of the late monographs, which ought to be in the hands of every respectable practitioner. He designs sending forth a common-sized octavo annually, complete, or in half-yearly parts. An Appendix will be added from time to time, containing an outline of the *cases* given by the authors cited, which being arranged, may be bound up in a separate volume, forming a useful "Clinical Case-book," that may be consulted either with, or without the rest of the work. As conciseness is an indispensable requisite in the execution of such a plan, the original matter will be compressed as much as possible, the ipsissima verba of his authors only being given on points of essential moment, where perspicuity and weight might possibly be otherwise sacrificed at the shrine of brevity and obscurity. The *phraseology* will be couched in the simple abbreviated style best adapted to the purposes of a note book. The main scope of the work, then, unlike that either of an elementary or systematic one, or of a mere catalogue raisonné, is to give simply a succinct, digested view of much important pathologic and therapeutic matter, which lies widely scattered through some hundred volumes, the utility of which is for the most part, on that account, unavailable to the busy practitioner at the juncture when he most particularly requires it. It is, therefore, presumed that these volumes will form a work of general reference and consultation of no mean value. But the public reception of the first volume or two will be the measure of the compiler's future labours in this ample field. In his original analysis, the diseases were grouped *anatomically*, according to their seats, merely for the sake of convenience, and as this is a point of little importance while a table of contents is given at the commencement, and a special index at the end, of the volumes, this arrangement will be still pursued, thus:

α Diseases of Brain and Nervous System—β Of Respiratory organs—γ Of Sanguiferous System (Fever, Inflammation, &c.)—δ Of Chylopoietic Viscera—ε Of Absorbent and Glandular System—ζ Of Organs of Sense—η Of the Muscular System—ϑ Of the common Integuments—ι Of the Urinary Organs—κ Of the Organs of Generation—λ Of the Bones and Appendages.

A catalogue of the preparations in the *Anatomical Museum of Guy's Hospital* arranged and edited by desire of the Treasurer of the Hospital, and of the Teachers of the Medical and Surgical School, by Dr. Hodgkin, Demonstrator of Morbid Anatomy and Curator of the Museum of Guy's Hospital, is just published by Mr. Highley.

Sir ASTLEY COOPER has just brought out a splendid work on the Structure and Diseases of the Testis, accompanied by 24 beautiful coloured plates.

Mr. CURTIS, Surgeon Aurist to His Majesty, has just published a Clinical Report of the Royal Dispensary for Diseases of the Ear, from 1816 to 1830, containing an account of the number of patients admitted, cured, and relieved, illustrated with cases and practical remarks relative to the various affections of the ear.

New Medical Journal in Ireland.

We have received the prospectus of a new monthly medical journal to be published in Clonmel, under the editorial direction of Mr. D. Ph[illegible]. It is an arduous undertaking; *but we sincerely wish it success.*

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XV.

POPULAR ILLUSTRATIONS OF MEDICINE. By *Shirley Palmer*, M. D. 8vo. pp. 396. Baldwin, 1829.

Falsa vincere veris.

WE shall not here discuss the long agitated question, whether mankind is or is not benefited by the dissemination of *popular* works on medicine. No physician of observation can fail to perceive that the practice of physic is thereby increased. In the history of each case, it generally comes out, incidentally of course, that the patient has been tampering with his complaint, for some days before the doctor is called in; trying such and such a remedy prescribed in such or such a work on popular medicine. By this procedure, much precious time is lost, and many days or weeks added to the duration of the malady. But this is not the question. Can an author who professedly writes for *popular* instruction, expect that his work shall be reviewed or noticed in strictly professional Journals? We think he ought not to expect it,—and yet he invariably does so. He addresses his lucubrations *expressly* to the *general* reader—and expects that the *medical* Reviewer should carefully analyze them and delineate their contents to the profession! Really this is a very unreasonable expectation; and it is one which we have never hitherto gratified. The appearance, however, of a *popular* treatise on medicine from the pen of our old friend and collaborateur, Dr. Palmer, startled us not a little—for we thought he was one of the last men on earth who would have embarked in such an undertaking—an undertaking almost invariably originating in knavery—the lowest species of literary speculation—or disguised quackery. And, indeed, it is only when based on one or other of these principles, that POPULAR MEDICINE is ever successful. We were quite satisfied that Dr. Palmer would never condescend to quackery or puffery—and from the moment we read the title-page we had misgivings that *he* was not the man for a POPULAR TREATISE on diseases. A glance over the work has satisfied us that it is a complete failure. It is infinitely too learned, too scientific, and too technical, for the general reader; while his title-page and dedication tend to prejudice the medical profession against the work. Who would expect a popular treatise on medicine from the pen that gave vent to the following passage?

"Every attempt to instruct the public in the discrimination and management of particular diseases, must be as futile in execution as absurd in principle. No one professes to rectify the derangements of even an ordinary piece of mechanism unless he be duly quali-

fied by previous education, for the undertaking. Who then, unprovided with the light and the instruments of science, shall presume to repair the injuries, or regulate the deviations of a machine, the structure of which is far more delicate and complex than that of any work of human production."—*Preface.*

A little further on Dr. Palmer endeavours to excuse or rather to justify the "attempt to instruct the public," by saying that "civilized man should be taught, by a clear exposition of their source, character, and operation, to protect himself from the influence of the various EXCITING CAUSES OF DISEASE, and thus avert the sufferings which they may otherwise inflict." Certainly, if the causes of diseases were always or even generally cognizable by the senses, and could be portrayed to the non-professional world at large, it would be very meritorious in any physician to do so. But who does not know that ETIOLOGY is one of the most difficult and mysterious branches of our *occult* science? Independently of this, Dr. Palmer does not confine himself to the *exciting causes* of diseases, but goes far more deeply into their pathology, treatment, &c. Then comes another hacknied excuse for POPULAR MEDICINE—the attempt to set up the patient as the judge of his doctor's medical knowledge!

"He should, at least, know so much as may enable him to elicit from his professional attendant, and to comprehend, an explanation of the nature of any disease under which he may suffer; and the leading principles of the treatment to which he may be required to submit. And surely the talent or integrity of that practitioner may be fairly questioned, who cannot render his views and opinions intelligible to a common intellect." vi.

Verily, Dr. Palmer, you would have some difficulty in rendering your "views and opinions" intelligible even to your own brethren—and much more to "common intellects," who, we venture to assert, will not comprehend one line in every five hundred throughout the volume! In short, Dr. Palmer is totally unqualified for the task of a "*popular*" writer on medicine, from entire want of that trickery, quackery, mendacity, ignorant presumption, and utter disregard of every thing but pelf, which characterise the writings of nine-tenths of this class of authors. A cursory look over the volume before us has, however, convinced us that it is far better fitted for professional than popular perusal—at all events, we hope to prove, in the course of this article, that there are many facts, views, observations, and even opinions, in Dr. Palmer's *Popular* Treatise, which are deserving of notice in a strictly *medical* Review. Our author, indeed, informs those of his professional readers "who shall condescend to peruse these pages," that they may, perchance, descry some bold deviations from commonly received opinion respecting the causes and the treatment of several diseases. Dr. Palmer was, we believe, a strenuous disciple of the Abernethy school, and flourished the CHYLOPOIETIC BESOM very freely in sweeping diseases out of the midland counties. But "ten years of close and extended observation have elapsed since a great revolution was effected in the writer's early views. Subsequent experience, while modifying and correcting, has served only to confirm the change insensibly wrought upon his mind by the irresistible evidence of facts." We shall introduce, further on, a severe, but not unjust, critique on the EXTRAVAGANZAS of the Bartholomew school, which are now beginning to be seen in their proper light, but not before they have inflicted their quota of misery and perhaps death on the human race!

The work is divided into ten chapters, from each of which we hope to glean something that may afford food for useful reflection, if not direct and positive information.

The first short chapter glances at the various Exciting Causes of Disease.

In this chapter, which is little more than introductory, Dr. P. shews that his attention has been strongly directed to the operation of *moral* causes in the production of corporeal maladies—and he strongly regrets that writers on popular medicine should have neglected this important branch of etiology. But, if Dr. P. had thought for a moment, he would have recollected that these popular writers knew nothing of the matter!

In the second chapter, Dr. P. considers the pre-eminent importance of the brain and spinal marrow in the animal economy—and shews himself to be a temperate and tolerant examiner of the doctrines of phrenology.

"Specious beyond all precedent, and apparently confirmed and illustrated by many striking facts and occurrences in the world around, Phrenology assumes a most imposing character, and presents a powerful claim to public attention. Yet the painful remembrance of many a past illusion, once equally bright with promise to human fortunes and improvement, inculcates a salutary lesson of circumspection. On the one hand, too strange and splendid, and, in the language of a gifted writer,* too 'good,' to be true in all the minuteness of its details, the theory of the German philosophers will yet be regarded by the reflecting mind as, on the other, too ingenious,—too clearly illustrative of several otherwise inexplicable phenomena exhibited by man in his various passions, propensities, and diseases,† to be utterly destitute of foundation in nature. The introduction of error into their practical application can never be fairly or logically adduced as a proof of unsoundness in the principles of a science, especially where that science, yet in its infancy, is surrounded by extraordinary sources of doubt and difficulties of investigation. Whatever be the ultimate fate of their doctrines, much is due to these celebrated men for the valuable additions which they have unquestionably made to the previously imperfect knowledge of the human brain; and for the unbending spirit with which they have submitted to toil and indignity in the promulgation of their discoveries and opinions. The generous mind sickens with pain and humiliation on reflecting that, in a civilized land, and in a city boasting of her pre-eminent elevation in literature and philosophy, a zealous and enlightened stranger should have encountered, for a while, nothing but obloquy and ridicule. Respect, at least, is justly claimed by all those, however visionary their doctrines, who, inspired by a love of science, have unsparingly sacrificed to its promotion, their home, their fortune, and repose. And History, in retracing the progress of the human mind during the nineteenth century, will indignantly avenge the insults, with which an invidious contemporary has attempted to slur the distinguished names of Gall and Spurzheim; and do ample justice to the splendid talents and attainments, which he, in an evil hour, has affected to despise." 14.

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* "Dr. Archibald Robertson."

† "The occurrence of partial insanity,—of mental hallucination on one exclusive subject,—appears to be quite inexplicable on the supposition that the whole of the brain constitutes a single organ. And many striking facts in nature and in the phenomena of injury and disease, may be adduced to demonstrate the close connection which exists between the cerebellum and the passion of physical love. Phrenology, moreover, supplies foundations for a system of moral philosophy, more solid and intelligible than any which has hitherto been proposed."

The foregoing and the first specimon of Dr. Palmer's style, will convince our readers that HE is not to be classed among the common herd of writers, or rather ignorant *compilers* of POPULAR MEDICINE.

After some cursory observations on the structure and functions of the brain and spinal marrow, Dr. P. remarks that, as the substance and membranes of the brain may be the seat of congestion, inflamation, and other diseases, without increased sensibility, enlargement, or other alteration of the cranial bones—so different diseases of the spinal marrow may exist, and even proceed to a fatal termination, without any unnatural tenderness, projection, or other appreciable change of the bony canal. Men of great reputation and experience have been known to deny the existence of spinal disease, because, on examination, they could not detect any morbid condition of the bones.

Inflamation of the brain and spinal marrow, when acute, is commonly signalized by strongly marked phenomena—not so some chronic affections of both organs, which proceed in such an insidious manner, or assume such Proteiform characters, as to elude the scrutiny of the most vigilant physician, if his attention have not been previously and powerfully excited to this obscure tribe of cerebro-spinal diseases. Dr. P. elucidates these observations by allusion to one or two affections which, although very prevalent, are too frequently misunderstood and consequently mistreated.

"In females at an early age, and especially in those of feeble and delicate constitution, pain about the convexity of the sixth or seventh rib, frequently forms a most obstinate and distressing symptom. It is usually, yet not invariably, seated in the left side. In general it is dull, wearying, confined to a small spot, and distinctly circumscribed. But it is subject to paroxysms of such acuteness and severity, as to assume an aspect very strongly resembling that of *Neuralgia* or tic doloureux; and, without doubt, as closely allied to it in origin as in character. During the violence of these paroxysms, the pain sometimes strikes upwards in the direction of the breast-bone and shoulder; and a sense of numbness, of tingling, and loss of power, are felt in the corresponding arm. Long preservation of the erect posture, fatigue, grief, anxiety, and all the depressing agents, and ingestion of food, particularly in a solid state, are constantly followed by aggravation of the pain. It suffers no very decided change on full inflation of the lungs with air; nor is cough or difficulty of breathing, although sometimes forming a dangerous complication, essentially connected with it. By the assumption of the recumbent posture, great relief is almost instantly obtained: and, so signal and invariable are the results of this simple expedient, that it appears to constitute the best, if not the only, diagnostic sign of the peculiar character of the affection.

"Females, whose time is unduly devoted to fatiguing domestic occupations or sedentary pursuits, and who are consequently excluded from the invigorating influence of air and exercise, most frequently suffer from this "intercostal pain." Head-ache, depression of spirits, debility and lassitude of the muscular system, weakness of the pulse, tremor or palpitation of the heart, wearying pains and coldness of the extremities,—constitute its ordinary,—and excessive torpor of the bowels, one of its most invariable—attendants.

"It is occasionally complicated with loss of voice or *Aphonia;* and sometimes, although more rarely, with unnatural pulsation in the chest and obstinate rejection, by vomiting, of every alimentary substance introduced into the stomach. Instances of its obvious alternation with intense pain in the head, accompanied by violent throbbing of the carotid arteries, and by all the phenomena of a high state of cerebral congestion, have sometimes been observed.

"Commonly regarded as organic disease of the heart, or inflammation of the pleura, liver, or spleen, the treatment of this affection is, in most instances, as unsuccessful, as the views upon which it is founded, are erroneous. Bloodletting, general and local, blistering of the side, mercury, abstinence, and all the depleting remedies, afford sometimes a transient, but delusive, mitigation. More frequently, they aggravate the pain, and increase the debility by which it is constantly attended. If blindly persevered in, they may produce irrecoverable exhaustion of the system, or affections more perilous than that which they were intended to relieve. On the other hand, the pain will be tranquilized, and, in general, ultimately subdued by undeviating perseverance in a plan of treatment, of which reclination on a couch for several hours daily, simple but generous diet, aloetic aperients, preparations of iron, and the other metallic and vegetable tonics, stimulation of the integuments of the spine, cold sponging or the shower bath, form the principal constituents." 24.

In the earlier periods of the complaint, Dr. P. observes, the spine, on examination, will evince little alteration from its healthy state. In general, however, a slight degree of tenderness will be evinced on the application of pressure, in one or more points between the middle of the dorsal portion and the summit of the column. At a more advanced period, spinal pressure will scarcely be borne, and is often productive of pain, darting like an electric shock into the chest or arm. According to the duration or severity of the complaint, one or more of the vertebræ will exhibibit the well-known characters of disease, and the process of spinal deviation will have commenced. The progress of the morbid changes will be greatly accelerated by debilitating treatment. "Irretrievable distortion of the spine, with all its hopeless and distressing infirmities—habitual hysteria or chorea, nervous atrophy—or pulmonary consumption, are generally the sad consequences of neglect or error of this most common and insidious affection."

Aphonia is a morbid phenomenon of frequent occurrence in delicate or weakly females—and is, according to our author's views, "obviously connected with spinal irritation and congestion, and dependent, for its immediate production, on a morbid state of the inferior laryngeal or recurrent nerves." When of recent origin, Dr. P. has always found it yield to the invigorating plan of treatment. A blister applied to the back of the neck signally expedites the recovery. Mercury he thinks inadmissible, for although it sometimes removes the aphonia, it weakens the patient and renders her more liable to relapse.

We now come to a series of remarks which are evidently issued forth by our talented author with the professed view and confident expectation of contributing effectually towards a counter-revolution in the medical world of these islands, by giving a death-blow to the "DIGESTIVE ORGAN" doctrine and practice, so long supported by the names and authorities of Abernethy, Hamilton, Curry, and a host of their disciples. The author must be allowed to speak pretty freely for himself on this occasion.

"The other disease, which may be most aptly selected as illustrative of insidious cerebral irritation, has, of late, acquired a great ascendency in these islands. Keeping pace with the rapid progress of intellect and refinement, of commercial speculation and adventure, it almost rivals in frequency tubercular consumption itself; and constitutes, in fact, one of the prevailing chronic diseases of the age. This affection consists in an obscure state of irritation of the brain, commonly implicating the superior portion of the spinal marrow. The causes, which predispose the system to its attacks, are probably connected

with some original peculiarity in the moral or physical constitution of the individual. Those which excite it into action, may be distributed into the internal and external. They operate either directly by inducing an increased afflux of blood to the brain, as inordinate mental exertion, anxiety, grief, and the infliction of mechanical violence; or indirectly by the stimulation of a remote organ, as intemperance; or by destroying the balance of the blood's circulation, as profuse hæmorrhage. In the majority of cases, however, the disease may be distinctly traced to a moral source. For its proximate cause it apparently depends on augmented impulse, or irregular distribution of blood to the whole, or part, of the cerebral mass. Whatever these causes be, when once induced, it will be kept up, and aggravated, by every moral or physical irritation or excess.

"In its commencement and early progress, this affection is often so obscurely marked as to be with difficulty recognizable. The external phenomena to which it gives rise, are, indeed, sometimes more clearly discernible in a remote organ, than in the brain itself: so that, until it has acquired, from duration, a certain intensity, and until all the ordinary methods of treatment have been found unavailing, the precise seat and character of the disease are rarely suspected. Little known in the tent of savage, or in the peaceful dwelling of pastoral life, it visits the retirement of literature and science, the busy haunts of commerce and refinement. The sedentary in occupation, the ardent and susceptible in feeling, and the highly gifted in intellect or attainment, are peculiarly, although not exclusively, exposed to its aggressions.

"Two distinct varieties of this formidable affection may be clearly discerned in practice. Anxiety of countenance, an air of peculiar restlessness and despondency, obscure pain or heaviness, with increased heat of the head, undue pulsation of the carotid arteries, and slight puffiness of the cheek,* constitute the leading external signs of the complaint in its more simple and concentrated form. The tongue is usually clean; the secretions of the liver natural; the bowels torpid; the appetite unimpaired; the pulse at the wrist feeble, and somewhat accelerated. The mind is haunted, especially at night, by gloomy anticipations and terrific images. In some severe cases, there occur intervals of respite from

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* "There are a few external signs which, although very commonly present and distinctly marked, have not been generally observed, or recognized, as diagnostic of derangement of function, or disease of structure, in the brain. One of these is *a slight œdema, or pitting of the cheek on pressure.* It very often exists in simple congestion; and, in such cases, has repeatedly been pointed out by the writer to his professional friends. The mode of its production is not very obvious. It must not be confounded with the swelling of the face, very frequently observed in diseases of the heart. The general character of the attendant symptoms, and the absence of dropsical swelling of the extremities, will suffice to prevent the circumspect practitioner from confounding it with the latter more decided and ominous appearance. *Obscure pain with stiffness of the muscles of the neck*, constitutes another of these neglected signs. It usually accompanies those cases, where mental restlessness and excitement, dependent on cerebral irritation, occur at intervals; and the access of the paroxysm is then marked by recurrence or aggravation of it. Wrinkling of the integuments of the forehead, produced by contraction of the frontal muscle, is its general attendant. By hasty or unreflecting observers, it is often beheld, and treated, as a rheumatic affection. The last diagnostic sign, to which it will here be necessary to call the reader's attention, is an *unnatural and most striking projection of the eye-ball.* The progress of this change is, in most instances, slow and uninterrupted. In others, its accession has been more sudden. Its extent is sometimes such that the organ seems as though it were partly protruded from the socket. The practical inferences, which may be drawn from a decided existence of this sign, are as unerring as unfavourable. It will be invariably found to *indicate* that a fatal process of morbid alteration is going on within the skull."

suffering, the duration of which is as uncertain as their cause inexplicable; and the recurrence of the paroxysm is generally preceded by involuntary starting of the muscles of the spine; pain, and stiffness, of those of the neck; and attended with extreme restlessness, and flushing heat of the head and face. Its ordinary termination, when mistaken or unsuccessfully treated, is organic disease of the brain, and insanity, paralysis, or fatal apoplexy.

"In the other yet more obscure and embarrassing shape, which the complaint frequently assumes, one or more of the remote organs conspicuously exhibit the signs of its existence. It varies in aspect according to the organ thus consecutively affected at the period of observation: and the diagnosis and treatment of the disease are too often erroneously fixed by an exclusive view to this imagined source. By writers apparently unacquainted with its actual origin, it has been aptly described as in form a real Proteus; in character, a genuine Mimosis. The lungs, the heart, or uterus, frequently suffer in this insidious affection: and the leading symptoms will be obviously determined by the nature and function of the organ thus implicated. Hence, dry irritating cough and disordered breathing; palpitation of the heart and faintness; and violent hysteria, constitute the respective signs of the three different secondary irritations just specified. They may exist separately or together;—alternate with hiccup and divers convulsive affections of the muscular system;—and sometimes succeed each other with such rapidity and violence as to astonish and perplex the practitioner who has not acquired a correct knowledge of their source and treatment. But on different portions of the intestinal canal, particularly the stomach and the colon, this cerebral irritation most frequently exerts its baneful influence: and, here, as in all other cases of complicated derangement, the consecutive re-acts upon, and aggravates, the primary complaint. The disease, thus established, may continue very long without inducing change of structure in the organ sympathetically disordered, or in its original seat, the brain itself. After having embittered, for months, or even years, the existence of the unfortunate patient, and too often rendered him an object of unmerited ridicule or reproach to the thoughtless or unfeeling, the disease is removed either by some auspicious change in his external circumstances, or by an interior revolution, spontaneously or artificially accomplished. Most commonly, however, neglected or mistaken, it pursues a fatal progress. The disordered function of the organ consecutively affected, terminates, at length, in incurable alteration of structure;* or, the signs of this derangement suddenly disappearing, the morbid action becomes concentrated within the brain itself, and exhibits all the external characters of the variety, first described, in an aggravated form. Softening of its substance and extravasation of blood; or inflammation with effusion, or thickening or ossification of the membranes of the organs ensues: and death terminates the conflict; or a state of madness or imbecility, far more terrible than the grave, obscures, or for ever paralyses, the intellect of the wretched sufferer." 32.

This is the far-famed "DISORDER OF THE DIGESTIVE ORGANS," a title which, Dr. Palmer avers, has been almost universally and indiscriminately applied to two very different affections—"different in source, though somewhat analogous in external character." Our author then dedicates a chap-

* "This fact is clearly illustrated by the case of the celebrated exile of St. Helena. He died from an organic disease of the stomach, induced, not as Dr. Kinglake whimsically argues, by the immoderate use of snuff, but by the incessant agitations of a singularly powerful and restless brain. This extraordinary man had never committed dietetic excesses. It will generally be found that persons, destroyed by cancerous affections or tumours of the stomach, have possessed strong passions, or suffered great mental conflict or solicitude."

ter to the origin and progress of the "INTESTINAL SCHOOL"—to an exposition of the errors resulting from the extravagant application of its doctrines—the "injury which it has inflicted on the cause of science—and the signs of its approaching fall."

Dr. Palmer is as well aware as any of our readers, that, for years past, we have been pointing out the mischiefs which daily occur in practice from the indiscriminate use, or rather abuse, of strong and long-continued purgative medicines. We shall endeavour to make room for an extract or two from the anti-Abernethian chapter, which is written with considerable spirit. After pointing out the failure, and even the dangers, of Dr. Hamilton's system, when carried too far in chorea and hysteria, when, "by abstraction of blood from the head and blistering of the spine, an occasional aperient, ammonia, preparations of iron, and the shower-bath, the disease may, in general, be far more promptly and permanently subdued," Dr. P. turns to the intestinal school of Bartholomew's.

"To the opinions and practice of Mr. Abernethy, however, it is especially important to direct the attention of the professors of medicine and the public. Such are the genius and reputation of this extraordinary man;—such the eloquence and enthusiasm with which he has promulgated his intestinal doctrines;—so specious is the theory which he has constructed,—so easy of adoption the practice which he inculcates;—that, upon foundations, far better calculated for the more transient erection of a fortune and a name, a school has, at length, arisen. The success of these doctrines has been as unprecedented as their simplicity;—their errors as signal as the fate which they are, ere long, destined to experience. To deny that vigilant attention to the state of the intestinal canal really involves an admirable principle in regulating the disorders of the general health, and of the various organs with which that canal so intimately sympathizes, would argue blindness as desperate as that which distinguishes the more bigotted adherent of the intestinal school. Yet that, from inordinate attachment to these fashionable and seductive doctrines, have arisen carelessness in the observation, and impotence in the treatment, of diseases, no candid or experienced observer can hesitate to admit. If all the various derangements of the human fabric result from irritation or disturbance of one organ or system of organs;—if all the morbid phenomena, which signalize these derangements, be referrible to one source, and curable by one plan of treatment slightly modified,—how greatly may the study of medicine be curtailed, and its practice simplified. The time, labour, and fortune, heretofore expended upon medical education, have obviously been expended in vain. The importance of minute investigation into the history, and seat, and character of diseases, and the external signs by which they may be respectively distinguished during life, vanishes, like a morning-dream, before the light of the new doctrines. The illiterate empiric and the village crone may again, as in days of old, enter into successful competition with the enlightened man of art. Obscurity in the nature, and hesitation in the name and treatment, of an individual affection, can no longer exist. The intestinal discharges and the tongue of the patient alone require inspection. To mercury and sarsaparilla, senna and the neutral salts, the catalogue of medicinal remedies may be safely, and most conveniently, restricted. And those stubborn diseases, which now and then inexplicably defy the united operation of blue pill, rhubarb, and the vegetable decoctions, may be confidently denounced as incorrigible; and their unhappy victim be abandoned, without further struggle, to his fate." 41.

Dr. P. is afraid that Nature, in her various operations, however simple *and beautiful*, does not act with such uniformity as may suit the generalizing

spirit, and the sweeping inferences of the Abernethian theory. Man, in the progress of civilization, and in the lapse of ages, has deviated widely from the simple path which Nature originally pointed out:—his diseases have, consequently, assumed the artificial character of his habits, and have become more complex and obscure. No doubt too, that man possesses various other organs besides stomach, bowels, and liver—all as important—and many of them as susceptible of disorder. The disciple of the "Intestinal School," Dr. Palmer thinks, is apt to overlook the brain and spinal marrow—the heart—and the lungs—though each of these may become the seat of primary disease, and propagate it in other organs.

"If, again, it be conceded, as truth demands, that, in these luxurious times so peculiarly favourable to their development, morbid conditions of the stomach do very generally prevail,—the inference, by no means, follows that *all* such affections originate in the organ itself. On the contrary, it must be obvious to the unprejudiced eye, that *many* of these derangements, heretofore considered as primary, are, in fact, merely symptomatic,—consequent on irritation propagated from a distant organ to the stomach; and hence susceptible of permanent removal only by means directed to the source from which they have emanated. If, for instance, the brain, from intense thought, anxiety, or the infliction of external violence, exhibit that state of congestion, which such causes notoriously induce, the digestive organs will immediately sympathize with it, and torpor or derangement of their functions necessarily result. Irritation from a diseased kidney or uterus, will exert such influence on the stomach as to excite all the phenomena and consequences of the most distressing sickness or indigestion. The physician who, under these circumstances, should direct his views and treatment exclusively to the consequent affection, would acquire as little reputation for sagacity, as claim to confidence or success." 43.

We are perfectly willing to accord to the justness of these observations; for who is not aware of the continual action and reaction of one organ on another? That there is a constant tendency in the human mind to generalize too far and too fast, so as to fix the primary seat of diseases in particular organs, there can be no doubt. The difficulty is to distinguish the original from the secondary affection. And it appears to us that the drift of Dr. Palmer's doctrines is to carry the multitude, who do not think too deeply for themselves, into the opposite extreme of the Chylopoietic school—and to locate the great origin of diseases in the brain and spinal marrow—those primary organs of sensation and motion, from whence issues all nervous influence—and on which all functions depend. There would probably be as much danger from running into the extreme of this doctrine (the cerebro-spinal) as that of the one which it is meant to supersede—the gastro-intestinal. The two greatest sources of corporeal disorder are, *moral emotions* of the mind, acting through the channel of the brain and its prolongations—and *improper regimen*, acting through the line of the digestive organs. The most talented practitioners and the most accurate observers will often be puzzled and unable to determine through which of these great channels the *causes* of disease have made their first approach—and how much more will the great mass of routine practitioners, who have hardly time to run from patient to patient, be embarrassed in the discrimination! Very subtle and wire-wove distinctions and discriminations are very beautiful and entertaining on paper—but when they are brought to bear at the bed-side of

sickness, even by many of the first-rate manufacturers, we have seen them, like certain other creatures of the imagination—

"Spread their light wings, and in a moment fly;"—

Or, if pressed into the service, and compelled to *work* in actual practice—sad has been the *work* they have put out of hand! It is far better then, we think, to be guided by the more plain and obvious indications—*the symptoms of diseases actually present*—than by fine-spun speculations that are too often as unsubstantial in their origin as they are inefficacious in their application.

Of the two *extremes* then,—and we maintain that the great mass of medical practitioners will be in extremes, whenever a theory is in active operation—we believe that which traces the origin of diseases to the "DIGESTIVE ORGANS" will be less injurious and less harrassing to the public, than that which makes the brain and spinal marrow the seats of the *same maladies*. Let us reflect a moment on the consequencss of this last theory, should it ever become fashionable. A practitioner sets out in the morning, and finds three fourths or more of his patients labouring under what have been erroneously called "disorders of the digestive organs," but which recent and accurate observation has traced to irritation or inflammation of the brain and medulla spinalis. Instead of ordering blue pill at night and black draught in the morning, he necessarily and consistently orders them to bed or to a hard sofa, where their heads are to be shaved, their temples leeched, and their spines blistered! On this system, we shall soon have town and country one great hospital! The lawyer may throw up his brief, for who would trust a man to plead a cause, whose brain and spinal marrow are diseased—the merchant may close his counting-house, for the doctor will not permit him to look into his ledger, lest he still farther irritate the brain and spinal marrow—the linendraper, the man-milliner, the confectioner—nay every tenant of the bazar, may shut up shop, for each and every of these labour under the falsely denominated "*disorder of the digestive organs*"! According to the old doctrine, the above-mentioned and various other classes of society may still hobble about and look to their affairs, even with a dose of Honest Johnny's black broth in their stomachs, because the said broth has no tendency to *confine* its admirers to the sofa, but rather disposes even the most sedentary habits to brisk loco-motion. Dr. Palmer, indeed, may say that this would be carrying his doctrines to *extremes*. We ask him does he not address a profession which has carried and does carry the other doctrine to extremes—and will always carry a new doctrine, when once embraced, to extremes! All we say is, that the cerebro-spinal doctrine, should it ever become half so epidemic as the chylopoietic, will be productive of ten times more distress to society at large, not only on account of the alarm which must necessarily be created in the minds of the patients and friends by the announcement of cerebral or spinal disease—but on account of the serious inconvenience, not to say ruin, which must result from the system of confinement enjoined among people who have the cares of a family or of complicated commercial concerns hanging over them! Dr. Palmer again may ask, "what has all this to do with a philosophic inquiry after truth?" We answer that, in the first place, we have some doubts about the TRUTH of the matter when found, or supposed to be found. In

the second place, it is with physic as with valour—the better part is DISCRETION! How often have we to deplore the lamentable lack of this last, among men of gifted talents and high acquirements in our profession! We every day see more misery inflicted on patients and their families by the indiscreet opinions and directions of their medical attendants, (whose words are oracles in the hour of sickness and danger,) than there is benefit conferred by even the most judicious counsels! We shudder to think on the quantum of mischief that must ensue, when a false and dangerous theory is put into the hands of the multitude in addition to the want of discretion which we here bewail! We have thrown out these hints, not as enemies to free discussion and philosophic inquiry; but with the sincere hope that we may benefit our junior brethren by directing their attention to the cultivation of *wisdom* as well as science in the practice of their profession. The want of the former, we can assure them, is of much more consequence than they imagine—often, indeed, of more real service, in so conjectural an art as ours, than attainments of much higher pretensions.

IV. The fourth chapter of Dr. Palmer's work is on the Influence of Moral Agents—of the Passions, &c. of the Mind, as the Exciting Causes of Disease.

In a work addressed to popular readers, the foregoing subject is capable, in proper hands, of being made highly interesting and useful. But Dr. Palmer's mode of handling it has disappointed us. An anatomical and physiological dissertation on the brain and spinal marrow is useless to the general reader, as being far above his comprehension, and not at all to his taste—while it is too superficial to be interesting to the physician or surgeon. In this, and in many other parts of the work, Dr. Palmer has shewn much of that want of tact and discretion which we have been just deploring. There are several sentiments confidently broached in this section, which we do not consider as drawn from accurate observation of facts—and which, indeed, are not such as we expected from Dr. Palmer. Thus, after telling us that the brain not only sympathizes with all the other organs, but is exposed to sources of irritation from which they are "altogether, or at least immediately, exempt,"—for instance, all moral and external impressions, strengthened by the refinement of education, and multiplied by the artificial wants and restless aspirations of civilization, he goes on thus:—

"And, at night, *when the heart pulsates, with an almost imperceptible languor, against the side; when the lungs perform, with inaudible effort and diminished frequency*, the process of respiration; and the stomach, having passed forward its evening meal, lies in a state of comparative inactivity and repose; *the brain, incessantly occupied in the work of nervous supply, is still exposed to agitation by every transient gust of passion and of feeling*,—still powerfully acted upon and excited by the mysterious imagery of dreams." 52.

Now our own observations have never shewn us this "almost imperceptible languor" of the heart in sleep. It may be sometimes a little more slow (and not often even that) in its action—but it is almost always more full and free—so that more rather than less blood is poured along the arteries at this time. In respect to the breathing, it is notoriously more deep and full, though somewhat less frequent, in sleep. As to its *inaudibility*, we believe that the exceptions to this are tolerably frequent—even in Dr.

Palmer's native land—and in that "house of God"—the KIRK. If the brain be "incessantly occupied in the work of nervous supply," Dr. P. ought to recollect that almost all the muscles of voluntary motion are at rest—and that there is an abdominal brain, and a ganglionic system, which afford no small aid to those involuntary motions that go on during sleep. How far the brain is agitated by "every transient gust of passion and of feeling," while we are asleep, we do not pretend to say.

The following passage is well written, though not perhaps quite so original as Dr. Palmer may think it to be.

"It has long been a favourite theme of argument and declamation with the moralist and philosopher, that the immoderate indulgence of sensual appetites and passions is invariably productive of punishment and remorse. *Yet no popular writer has hitherto arisen to point out the inference, which the preceding views evidently sanction, that disease and suffering are also the tax that man is doomed to pay for extraordinary elevation of intellect or acquirement.* Let them who seek to controvert this appalling truth, pause for a while and survey the difference which exists between the man of talent, and feeling, and education, whose soul is exquisitely alive to every passing event,—to every impression of beauty and grandeur,—of deformity and imperfection, in the natural and moral world,—and the coarse and stupid being whose powers of locomotion alone distinguish him from the plant on which he gluts his craving appetite;—whose faculty of speech, from the inferior animal, which, in the fewness of his wants as in the simplicity of his attainments and diseases, he so closely resembles. Little elevated in the scale of intellect above the Cretin of the Alps, or the unsheltered savage of the southern ocean, the latter exhibits a physical condition happily distinguished by its hardihood and insensibility. He cannot feel those fearful paroxysms of mental agony and depression; he is insusceptible of that poignant and unutterable suffering,—which impart to the diseases of the sensitive and refined an additional bitterness and gloom; and, while aggravating the miseries of sickness, retard or utterly defeat the operations of medicine; and for which no splendour of acquirement or reputation, nor all the baubles of opulence, can afford to the wounded spirit a remedy or compensation. The stomach of the Boor may, indeed, be deranged by an occasional debauch. Extraordinary exposure to inclemencies of weather may induce in his hardy frame, an attack of rheumatism or inflammation. An emetic or a blood-letting will, however, usually suffice to restore his wonted health. To him are well-nigh unknown those more severe and embarrassing forms of nervous and intestinal disease which infest the higher orders of society. And, were he able to comprehend suffering which he has never felt, and thus to correctly appreciate his own superiority in physical enjoyment, he would, perhaps, regard the restless votary of fashion,—the busy aspirant to celebrity or wealth, with an eye rather of commiseration than of envy." 55.

Dr. Palmer is well aware that this subject has been touched upon by many writers. The following extracts are not unknown to Dr. Palmer.

"When the human species began to congregate in cities, it was soon perceived that in *this* class of society, the exertion of the *intellect* must predominate over that of the *body*. As civilization advanced, intellectual labour became more necessary, and the labourers multiplied in proportion. At the present period, the employment of a very large class of human beings, especially in civic life, consists almost exclusively in *mental* exertion. Look at the rulers of countries; the legislators, with their innumerable hosts of agents and sub-agents; the members of the pulpit; the bar; the medical world; the literary world; the superior orders of the mercantile world. In all these mental labour is the *regular duty*, and corporeal exertion only the *occasional relaxation*. Nay, in the vast body of mechanics and artists

themselves, *thought* predominates over *action*. Even the semi-feminine man-milliner, who measures out our ribbon or [illegible] depends more on his talents, that is, on the volubility of his tongue, than on the agility of his muscles, for success in business. To such an extent is intellectual labour now arrived, that a very large and important class of society live entirely by 'teaching the young idea how to shoot;' and a still larger class, who have no actual occupation, rack their minds with inventions, schemes, and projects that fade away as fast as they are engendered."

"Now I have before shewn that the more a voluntary *muscle* is exercised, within a reasonable limit, the stronger and more capable of exertion it becomes: it is so with the brain and nervous system; the more their faculties are brought into play, within a certain bound of moderation, the more extensive becomes the sphere of their power. The sense of touch, the sense of smell, and the sense of hearing, all become more acute, in proportion as they are exercised. *But this extra development and sensibility of the brain and nervous system, cannot take place but at the expense of some function, or structure, in the animal or organic system; for Nature, though sufficiently liberal, is, upon the whole, very economical of her gifts, and extremely impartial in the distribution of her favours. When, therefore, an undue share of the vital energy of any individual is directed to a particular organ or system, a proportionate subduction is made from some other organ or system, and this is a most undoubted, and a most important truth, which is little understood, and less attended to by the world in general.*"

"Civic life, by rendering the *senses* more acute, makes the *passions* more ungovernable than in rural retirement. In congregated masses of society, every kind of food for the passions is not only superabundant in quantity, but of the most stimulating quality. Hence, among a very considerable class in the upper walks of life, we find an unnatural and insalutary degree of excitement, kept up in the brain and nervous system from this prolific source. The extent of injury, which our health sustains in this way is beyond all calculation! Plato believed, that 'omnia *corporis* mala ab *anima* procedêre;' 'all diseases of the body proceeded from the mind, or soul,' and certainly a great proportion of them do! Here we cannot fail to perceive the great analogy which obtains between the state of the digestive organs and that of the nervous system, in civic and luxurious life. The one is over-excited by too much and too stimulating *food;* the other, by excess in the *passions*. The derangements resulting from *each* set of causes act and react, directly or indirectly, on *both* systems; and thus it is that we never see a morbid condition of the *nervous system* unconnected with a similar condition of the *digestive organs*, and vice versâ.

"The *over-action* of the principal passions on the brain and nerves, closely resembles the over-action of food and drink on the stomach and other digestive organs, in many minute particulars, and especially by attracting an *undue proportion of blood* to the over-excited parts. The whole of the phenomena attending the Proteian host of *nervous diseases*, and all the most successful methods of treatment, attest that their immediate seat, or source, is an unequal distribution of the blood, and of the sensibility. The brain and nerves, becoming more irritable, from over-excitement by the passions, their vessels swell with blood, and this *local turgidity* causes a constant pressure on, and keeps up a perpetual irritation in, the whole nervous system."

"It is extremely difficult to draw a parallel of enjoyment and suffering, in the intellectual system between the upper and lower ranks of life. If, to undergo much pain for the sake of a little pleasure, be a proof that the balance is in favour of the *latter*, then the *beau monde* has it. But if, on the other hand, the Hindoo precept, that 'rest is preferable to action, sleep to waking, and death to all,' have any foundation in reason, then a question may arise, whether the lower classes of society, who have little susceptibility towards intellectual pleasures or pains, may not, upon the whole, claim the *balance* of enjoyment, in their journey through the present state of existence. But, at all events, Nature has here, as in most

other instances, charitably ordained a surprising equilibrium. She has strewed the paths of rank, riches, and luxury, with a corresponding proportion of painful diseases, particularly of the nervous or intellectual system; while the uncultivated boor glides along, unconscious of the pleasures and unacquainted with the sufferings which necessarily grow out of civic society and intellectual refinement."*

We are afraid indeed that the aspiration in the last few lines of Dr. Palmer's extract will not soon be realized—namely, that the rustic boor will be brought to philosophize so wisely on the miseries of wealth and knowledge, and "his own superiority in physical enjoyment." The spreading thirst for information, and the rapid augmentation of numbers among the class of school-masters, militate sadly against Dr. Palmer's anticipations.

Dr. Palmer remarks that there is another peculiarity in the relative exercise of the different organs which, "has hitherto been suffered to pass without notice at all adequate to its practical importance," &c.

"*It appears to be a law of nature,—an invariable rule in the animal economy,—that no organ can be cultivated beyond a certain point, or long and powerfully exercised, except at the proportionate expense of its fellow members: that, in fact, if more than the due portion of nervous energy destined for its supply, be expended upon one, the other organs must experience a deficiency which will sooner or later be announced by the corresponding torpor or derangement of their respective functions.*" 56.

We have marked this passage in Italics, and if the reader will revert back to the passage marked in Italics, while quoting from a work published ten years previously, he will perceive he has copied it almost verbatim, and without any acknowledgment. He must indeed be conscious that this is not the only passage or sentiment he has made free with from the same source. But of this we do not complain. The practice is sanctioned by such high authority, now-a-days, as to excite no attention.

The melancholy effects of intellectual labour and corporeal inactivity in the poet, painter, sculptor, musician, man of letters, and statesman, are worked up by Dr. Palmer into a picture which, if generally perused, will drive half the above classes into the fens of Lincolnshire, (as we turn out horses into the marshes after the toils of the modern Babylon,) in order to take off all excitation from the intellectual system.

"Under these inauspicious circumstances, the intestinal canal, deprived of its wonted supply of nervous power,—of that invisible agent whose operation is as conspicuous as its nature unknown,—grows languid and irregular in the performance of its important functions. The muscular apparatus, if the excess be carried far, shares, ere long, the general failure. The body becomes feeble, emaciated, and unable to repel with pristine success, the encroachments of disease. The physiognomy assumes the peculiar characters of suffering and depression. And the brain itself, if original predisposition, or intemperance, favour not the development of the secondary affection, forms ultimately the seat of incurable alteration of structure. Hence the dreary assemblage of diseases, the indigestion, the intestinal tumour, and stricture, and ulceration,—the habitual congestions of the brain, the mental depression, the apoplexy, the madness and suicide,—of many of the most distin-

* *Influence of Civic Life, &c, on Human Health and Human Happiness*, 8vo, 1818.

guished legislators and statesmen who have lately appeared on the theatre of the world. In illustration of this argument, it were almost superfluous to re-trace the sufferings and fate of the exiled Napoleon, the paralysis of the estimable Lord Liverpool;—the premature decease of the illustrious Pitt, of the lamented Canning:—the miserable doom of Romilly and of Castlereagh. If this melancholy retrospect suffice not for his conviction, let the reader turn and survey the character and fate of those master-spirits of the human kind, who have so signally adorned the literature of their age and country,—men, whose fervid genius, like that of the immortal Byron, while pouring splendour around their name, left the mind involved in wretchedness or gloom; whose intellectual light, while illustrating every object, and charming every eye around, preyed upon, and consumed, within, the powerful brain from which it emanated." 58.

Dr. Palmer has wisely referred also to those who expend their lives and fortunes in the gratification of their sensual appetites—the powers of whose systems are exclusively occupied in converting or throwing off the enormous quantities of highly-seasoned aliment which are requisite to stimulate a pampered appetite.

"The distended stomach loses, after a time, its wonted contractility and its energies. The brain becomes, at length, loaded from mere repletion; and its vigour and sensibilities gradually blunted and impaired. Acidity and indigestion, gout and jaundice, directly resulting from abuse of the stomach, and aggravated by the cerebral torpor consequent upon it, signalize the commencement of the ravages of disease: and effusion into the cavity of the chest, the bowels, or the brain, terminates an existence in which the moral qualities, however originally bright, have long been declining; and which the nobler passions and propensities, if ever they were developed, have well-nigh ceased to influence and adorn. Where the powers of the intellect habitually slumber, there will the stomach, in general, exhibit its greatest activity: and in proportion as the abuse of the digestive organs has been excessive, the torpor of the brain will be more strongly marked. Idiots are notoriously voracious: the stupidity of the city-alderman has long been proverbial." 59.

Dr. P. has not failed to notice the remarkable effects of strong *corporeal exercise* in obviating the evil consequences of inordinate indulgence and habitual plethora—acting, in short, like the safety-valve of the steam-boiler, in preventing the dangers of an explosion. Hence it is, that the eager sportsman, or the active man of business, may gorge and drink to an extent which would soon destroy the sedentary and literary classes of society. This immunity, however, is seldom perpetual—the hour of retribution, though tardy, comes at last. The great practical inference is, that we should (more easily recommended than practised) equalise the cultivation of the different organs and faculties—proportion the exercise of the mind to that of the body—avoid all inordinate anxiety and application of the intellect—all sedentary pursuits—sensual propensities—and extremes of every kind. No advice can possibly be better—provided it *can* be followed—and provided the individual *will* follow it! Some little knowledge of the world has taught us that not one in five hundred *can* adopt the judicious counsel of our author—and not one in five thousand *would* do so if they could. The public do not care one farthing about our harangues against intemperance, indulgence, &c. They know, almost as well as we do, the evil consequences thereof. They do not go to the doctor for moral prohibitions against the *pleasurable* causes of diseases—No!—they go to him only for the cure of

them when once induced. They can have sermons enough from the pulpit, and at a very cheap rate; but they regard admonitions very little till they come to suffer the penalties of transgression.

We were rather surprised to see introduced among the morbid affections "signally kept up and aggravated, by the operation of moral causes," IMPEDED ELOCUTION—or, in more vulgar phrase, STAMMERING. This Dr. Palmer divides into two distinct kinds, organic and functional. The former, of course, belongs to operative surgery—the latter to the physician—and, of late, to a distinct class of practitioners. As Dr. Palmer promises, in the course of a year, "a Philosophic Inquiry into the Causes, the Phenomena, and Treatment of Impeded Utterance," we shall not dwell on what he advances on the subject in his present work. If we may be allowed to form an anticipation from one of the following passages, we should advise the author not to publish his intended treatise—for assuredly, not one in ten thousand stammerers will ever be able to put in execution the only effectual remedy, according to Dr. Palmer's views. The first extract is very curious, and we know it to contain the truth.

"It is a very curious, and according to the writer's experience, an invariable fact, that, in defective articulation from a merely functional cause, the most inveterate stammerer, when alone or believing himself to be alone, can articulate without the slightest embarrassment or unnatural effort, and without particular attention to the process of verbal delivery. He can even speak, or read aloud, with the most perfect facility before a congregation of persons, however numerous: provided they are speaking at the same time; and he consequently feels that the attention of the assembly is not directed upon himself. But the moment the solitude of the stammerer is, in the one instance, broken in upon; or, in the other, the company, among whom he is declaiming, becomes silent, the brain loses its salutary control over the organs of voice and speech; and his progress is arrested. To persons unacquainted with the real nature of impeded articulation, this fact must, and does, appear perfectly inexplicable. Astonishment is frequently expressed at the facility and distinctness of utterance with which a notorious stammerer will accompany a congregation in the public performance of the services of his religion." 67.

The next extract which we shall introduce contains a melancholy prospect—the more melancholy, as we know that the talented author has long laboured under the defect which he so fully and eloquently deplores—and consequently is no bad judge of the difficulties which attend its eradication.

"*Medicinal Remedies* are not essential, as some interested writers have lately asserted, to the successful treatment of impeded utterance. Yet, skilfully selected and employed, they will accelerate the efficacy of a system of cure which rests upon comprehensive and philosophical principles. Thus, the embarrassment of articulation will be greatly relieved, and its removal assisted, by the prescription of tonic medicine, invigorating exercise, the shower-bath, and generous diet,—in fact, of every agent that is calculated to sustain or elevate the physical powers, and rouse the spirit of the stammerer from the state of morbid susceptibility and depression into which it is almost invariably plunged.

"Yet no physical treatment, however judicious and effective, will, of itself, permanently avail. Deep and bitter will be the disappointment of those who shall rely on it as a protection from the recurrence of their infirmity. A rigorous system of *Moral Discipline*,—long and unwearied exercise in concentration of the mind upon the process of speech, and *in the* practice of self-control, will be requisite to burst asunder the mystic links of morbid

association, and effect a revolution in that moral state with which the evil habit is so closely interwoven. *Perfect freedom and fearlessness of mind, insensibility to the ridicule and the scorn of the ign rant and vulgar, a generous contempt for popular opinion, such an elevation of character and feeling,—such moral courage,—as a sense of moral purity can alone inspire,—constitute the goal to which the aspirations of the stammerer should be unceasingly directed.* This gained, recovery is no longer desperate. Every remaining obstacle will vanish before the auxiliary power of physical treatment. To achieve, therefore, his lasting liberation from the dreadful bondage of impeded utterance, *the individual should possess a mind not only strong in philosophy, but further sustained and enlightened by the moral virtues.* The sufferer may, perhaps, be cheered on and stimulated to increased exertion by the assurance that, while he incalculably promotes his own happiness and utility by this noble conquest of the infirmities of his nature; it will be impossible for him to acquire the necessary dominion over his feelings, and bring into due subjection his impetuous passions, without diminishing, at the same time, his susceptibility to the influence of the causes of disease, moral and physical; and thus rendering himself a more robust, a wiser, and a better man." 72.

We have taken the liberty of marking a few passages in the above extract in Italics. They will probably induce some readers to think that the able and estimable author of the work before us, is a little visionary in his expectations—or rather in his *moral* prescriptions; we say *moral*, because we have great reason to believe that, in *physical* prescriptions, Dr. Palmer is both energetic and judicious. We would ask the worthy author, how many, among his acquaintance in the midland counties—or any counties, north or south—are likely to attain the "perfect freedom and fearlessness of mind, insensibility to ridicule, &c." together with the "strong philosophy" and the "moral virtues," which he deems essential to the cure of stammering? To adapt his *methodus medendi* to the great mass of sufferers, Dr. Palmer must lower the scale of requisites by very many degrees—otherwise he will be like a great man, who had no defect of elocution—BURKE—

Too fond of the right to pursue the expedient.

Dr. Palmer next touches upon the "baleful influence of early (he ought to have said *too early*) mental exertion upon the physical development of children." We agree with him, that there exists not a more grievous or prevalent error than the solicitude which parents, now-a-days, evince, to stimulate the young mind to efforts injurious to the corporeal fabric. It is not, however, entirely the fault of parents. The "march of intellect,"—the doctrine that "knowledge is power"—the rapid increase of population—the closure of the flood-gates of war—the tremendous competition in all professions and avocations, force parents, school-masters, nay, Universities themselves, to stimulate youth to super-human exertions, by bribes, punishments, and every kind of positive and negative provocatives. The times are out of joint on this particular subject, and all the pullies and machines which our worthy author can employ will be of no avail in reducing the dislocation.

Passing over the 5th chapter on Inordinate and Defective Muscular Exertion, which does not contain any thing particularly worthy of notice, we come to the 6th, which has an attractive title in these days—"Of Intestinal Irritants considered as the Causes of Disease." The greater part of this

long chapter, however, is occupied with the consideration of poisons introduced by accident or design, into the human stomach—intestinal worms—and the effects of dentition. These subjects are not treated in a manner to arrest the attention of the professional reader. The same may indeed be said of many other chapters in the work before us. We are tempted, however, to introduce an extract from the 7th chapter, in which Dr. Palmer anathematizes the CIGAR in terms somewhat akin to those employed by a Royal author (King James 1st.) in his learned "*Counter-Blast to Tobacco*," which he winds up by characterizing the use of this favourite plant as "a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and, in the black stinking fumes thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomless."

Let us hear Dr. Palmer's opinion.

"The young man who, unjustified by the plea of ill-health, or unsanctioned by the prescription of his physician, has acquired the habit of smoking pipe or cigar, may assuredly congratulate himself on having reached the second stage of his progress from temperance to dissipation,—from elasticity of spirit and vigour of frame to premature imbecility and decay. As the reckless poacher is gradually led on, from his work of midnight depredation in the woods, to more daring acts of violence and rapine; so will the youthful Smoker be too often insensibly allured from a wanton indulgence in the cigar to the sins of intoxication, and the ultimate sacrifice of his health, his character, and prospects. Let Parents, then, as they appreciate the responsibility which devolves upon them, solemnly protest against, and resist, the first encroachment of this pernicious habit in their family. Let the Women of England, whose influence is commonly as beneficent as irresistible, exert their powers in decrying the noxious practice, and averting from those in whose reputation and welfare they are so deeply interested, the moral pestilence. If the leaders of fashion in the land are resolutely bent on destroying the little remnant of energy and character which they still possess, let them pursue their ignoble propensities, and achieve the work of moral ruin as they are wont to dissipate their fortunes, in private. Society will be disposed to contemplate with singular philosophy and forgiveness, any act of moral suicide which these "Spoilers of the human hive" may be tempted to commit. But let them not contaminate with noxious exhalations the public atmosphere;* nor the minds of the thoughtless and inexperienced, who are too frequently actuated by the vulgar ambition of aping fashionable follies, with their yet more pestilent example." 145.

Without at all advocating the cigar, and without knowing what the taste of it is, we cannot, from our own observations, join in this terrible denunciation of what we consider to be a very harmless, though perhaps not a very seemly indulgence. We do not believe that the present almost universal custom of cigar-smoking, among our youngsters, has any tendency to

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* "The execrable practice of masticating Tobacco has not been adverted to: since it is now almost exclusively confined to the lowest orders. Cigar-smoking must be a more ancient custom than has hitherto been supposed: or the Poet, who, in the 16th century, so aptly depicted the strange spectacles constantly exhibited in the streets and thoroughfares of England at the present period, must have been endowed with the miraculous power of second-sight:

"There, in the twilight, stalks
"An apparition dire, breathing out flame,
"And wrapt in cloud of most unholy vapour."

the vice of drinking. We much doubt whether the cigar is not often a substitute for the other indulgence. Of this we are certain, that, on the Continent, where the cigar is in every one's mouth, there is very little disposition to drinking—all classes preferring the smoke of tobacco to the stimulus of wine or spirits. In this cold and damp climate—and in the malarious districts of warmer climes, we are disposed to think that a cigar is innocent—if not beneficial during the absence of the sun, and when dews and noxious exhalations are returning to the earth from whence they arose in the day. Upon the whole, we think Dr. Palmer's anathema against the cigar much too severe.

Under the head of marsh miasma, and its consequence, ague, we must notice a passage, which, we think, will bear us out in charging Dr. Palmer with a tendency toward the establishment of a system—or, in plainer terms, a HOBBY, equally as exclusive as that of the Abernethy school. Every one knows that if we direct our attention to a certain stage, and to certain phenomena of an ague, as for example, the flushed face, the cephalea, the throbbing carotids, &c. in the hot stage, we may very easily conjure up the idea of topical inflammation, especially if we keep out of sight, or in the back ground, the other stages of the disease, and the apyrexia between the stages. But who is not aware of the injurious consequences which would almost inevitably result from practice founded on this view of the malady? Let us see whether or not Dr. Palmer's doctrines would lead us into this snare.

"In all the cases of ague, which it has hitherto been the lot of the writer to examine, decided symptoms of cerebral congestion have marked both the commencement and progress of the affection: and the success of a curative plan, modified by these views, has been so prompt and striking as to strongly favour, if not decisively prove, the correctness of the observation."

"This treatment will be best exemplified by the detail of a case. Last spring a young tradesman had suffered long from ague, contracted during his residence in Lincolnshire. The paroxysm had, for some time, recurred at uncertain periods. The symptoms observed on the writer's first visit, Sunday noon, were principally head-ach, loaded tongue, debility, great mental depression, scanty and unnatural discharges.—Prescribed, *a brisk emetic immediately; a full dose of Calomel at night, followed by a morning purgative: Ammonia in Camphor-mixture, on recurrence of the fit.—Diet: Tea gruel.*—Monday. *Calomel and antimony, in large dose, every six hours; Acetate of Ammonia in the intervals; hair removed; cooling lotion to the head.* Tuesday. Head-ach intense, with violent throbbing of the carotid arteries. *Fifteen leeches to the temples; medicines continued: purgative next morning.* Wednesday. Head much relieved. *Medicines continued: blister to the nape of the neck, if the pain return.* Thursday. Countenance improved; tongue clean; skin moist; evacuations free and natural; mouth slightly sore. *Calomel discontinued: a purgative.* Friday. *Sulphate of Quinia, two grains every six hours; more generous diet.* Recovery, from this time, rapid. With the exception of slight rigors on the evenings of the second and third day, the paroxysm never re-appeared during the treatment: and has not, to the writer's knowledge, since returned." 149.

We see in the above case that ptyalism was induced, and we know that mercury will often stop the paroxysms of ague, at least for a time—but with all due deference to Dr. Palmer's judgment (especially as he professes to have seen very little of ague) we argue, that a much milder treatment than

vomiting, purging, bleeding, "large doses of calomel and antimony every six hours," shaving the head, blisters, sore mouth—*and, after all, the quinine*—would have conducted the Lincolnshire visiter to a safe conclusion of his ague. On this point we appeal to the experience of our readers in general. The passage altogether exemplifies the effects of a predominant theory. That Dr. Palmer should embrace the cerebral doctrine of fever so long and so tenaciously maintained by Dr. Clutterbuck, is quite natural. The following curious *facts*, however, respecting the spontaneous origin of fever, and its subsequent reproduction by contagion, are worth several pages of theory.

"Within the last twenty years, the author has collected some curious facts respecting the origin and propagation of Typhus. From these, a striking example of its spontaneous commencement and obstinately infectious nature may be adduced. A robust young man, occupied in "ditching," near a healthy and finely-situated village in Staffordshire, was attacked with fever and pain in the limbs. The anti-inflammatory treatment was adopted. About the fifth day, without evident cause, the tongue became suddenly hard and black; the teeth covered with sordes; and the body with petechiæ. Delirium and subsultus ensued. He died next day. The mother, who had nursed him, sickened on the Monday, and expired on Wednesday morning, with symptoms yet more stongly marked. The fetor of her body before death was dreadful; after it, intolerable. Scarcely was life extinct when decomposition commenced; and, in a few hours, the corpse exhibited a mass of putridity. The house was immediately cleared of its inmates and furniture; white-washed, and fumigated under the inspection of the writer, and locked up. But the disease had already shewn itself among the children of an adjacent cottage; and from them been communicated to several persons in the village. The fever first shewed itself in early spring: autumn arrived ere it had completely disappeared. During the winter which followed, every vestige of it seemed extinct. But no sooner, in the ensuing spring, were the two deserted tenements re-occupied than typhus, of a milder character, was developed among their inmates, and again extended to the village. A second time was the disinfecting process more rigorously employed: and the houses shut up for many months. The fever again broke out on their being re-tenanted. Nor was the village completely freed from the scourge of typhus, until the two cottages from which the infection had originally emanated, were, at the suggestion of the writer, demolished." 157.

Our limits are in view, and we must skim very lightly over the remainder of the work. Upwards of 30 pages are occupied with the subject of hooping-cough. Dr. Palmer coincides pretty nearly with Dr. Webster in his theory of the disease. He admits, indeed, that hooping-cough consists originally and essentially in local, and probably specific, inflammation of the aerial mucous membrane—but that it speedily becomes "complicated with cerebral congestion—and *then* assumes the *convulsive* character." This is as much as to say that the *cough* depends on bronchial inflammation—but the *hoop*, on cerebral congestion. He goes just half way to Dr. Webster's theory. His ideas precisely accord with those of M. Desruelles, who proposes to designate hooping-cough by the term "*broncho-cephalitis.*" Nevertheless, Dr. Palmer takes a more rational view of the nature of the disease, (in our opinion,) than either of the two authors above-mentioned. The following extract will convey some notion of Dr. Palmer's doctrine.

"During the violent paroxysms of the cough, the blood is propelled in undue quantity and with increased impetus to the brain; and the irritated and loaded organ re-acts with

augmented violence, on the local malady. Numerous facts in the history of Chincough are illustrated by this view. Of these, the most striking are,—the absence of the convulsive character in the other inflammations of the air-passages not complicated with cerebral irritation:—the existence of the cerebral symptoms invariably observed in even the mildest form of chincough:—the frequency of nasal hæmorrhage; and the marked relief of the bronchial affection resulting from it:—the notorious tendency of the brain to active disease in hooping-cough; *from which some writers have been led erroneously to infer that the latter is simply a cerebral affection*;—and, lastly, the maintenance of the convulsive character long after every trace of the original inflammation of the respiratory membrane has disappeared;* and the final removal of the disease, at that period, by spinal irritants, powerful moral impressions, or other agents which can exert no direct influence upon the bronchial membrane, or on any other organs, except the spinal marrow and the brain." 183.

Dr. Palmer reviews, in succession, the various remedies which have been or are used in hooping-cough—and his remarks are generally judicious—often acute and ingenious. Till the appearance of Dr. Watt's work on Chincough, in 1812—founded on illness and death in the author's own family, there was little satisfactory on record respecting the pathology of the disease—and very feelingly did Dr. W. deplore the absence of all precise information in the works which he consulted. On dissection of his own two children, bronchial inflammation was discovered—and other victims of the disease exhibited similar phenomena. In attributing it exclusively to this source, Watt was followed by Marcus, in 1816—Alcock in 1820—Guersent in 1823—Pearson in 1824—Dewees in 1825—Fourcade-Prunet in 1826—and many British periodical Reviewers. On the other hand, Leroy, in 1803 (Médecine Maternelle) Boisseau, Webster, and Begin contended that chincough is essentially a cerebral affection. Dr. Palmer thinks that the question has been decisively settled by Desruelles, whose doctrine has already been alluded to, but which may be concisely enunciated in the following passage translated by Dr. Palmer himself.

"Chincough is, in fact, only Bronchitis complicated with cerebral irritation. The inflammation of the bronchia is always primitive; the irritation of the brain, consecutive. While the bronchitis is simple, the cough exhibits nothing peculiar; but when the diaphragm and respiratory muscles, and those of the glottis and larynx,—are drawn into spasmodic action under the influence of the cerebral irritation, the cough changes its character and becomes convulsive." 183.

There is probably no material objection to this view of the pathology of hooping-cough. It is nearly that which we have occasionally urged when noticing Dr. Webster's theory—and it is a view which does not interfere with the most appropriate practice in this complaint.

In the 9th chapter of the work before us, Dr. Palmer has, under the head

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* "This clearly explains one of the sources from which error has arisen in investigations of the Morbid Anatomy of Chincough. A child is destroyed by an affection of the brain, connected with the disease in its latter stages; and consequently after every visible trace of the bronchial inflammation has disappeared. On dissection, the bronchial membrane is found in a natural condition: and hence an apparently correct although erroneous inference may be drawn that a morbid state of this membrane constitutes no essential character of Hooping-Cough."

of "Influence of the Atmosphere," given, among many other articles, a very interesting sketch of neuralgia, or tic douloureux, a disease to which Dr. P. has paid particular attention. We greatly regret that our closing limits prevent us from doing justice to this and the remaining part of the volume. We shall endeavour, however, to make room for a few extracts.

"In the *Treatment* of Constitutional Neuralgia, the obvious indications are, to relieve pain;—to avert or remove all those circumstances by which the distressing symptoms may be sustained or aggravated;—and to effect a permanent alteration in that state of the vascular and nervous systems which constitutes the proximate cause of the affection. Hence, the treatment may be distinguished into the Palliative, the Auxiliary, and the Essential Plans.—The *Palliative Remedies* are principally local. They consist in the application of leeches, of external warmth in the shape of fomentations, and currents of steam directed on the part; or stimulating or anodyne embrocations or plasters. They exert a merely temporary influence, either by diminishing the sensibility of the morbid nerve, or protecting from the impression of cold or of atmospheric changes, the surface on which it is distributed. They may be prescribed, with advantage, to procure respite from suffering until time has been allowed for the operation of more effective measures. From the application of blisters to the seat of pain, increased irritation, rather than relief, usually results. The internal employment of Opiates, as a mere Palliative, should also be avoided. By interfering with the biliary secretion, and constipating the bowels, it deranges the functions of the intestinal canal; and thus keeps up, or augments, the cerebral congestion and disorder from which the morbid affection has directly emanated.

"Under the *Auxiliary Treatment*, are comprehended an attention to, and the removal of, all those exciting causes, and conditions of the system, whereby the duration of the disease may be prolonged, or its severity aggravated. Respite of the brain from the fatigues and cares of business and from the influence of depressing passions;—defence or abstraction of the body from the operation of a damp or chilly atmosphere by clothing, or by confinement to a regulated temperature, or a change of residence:—and correction, by emetics, purgatives, or dietetic restrictions, of that unnatural state of the intestinal functions which, resulting from cerebral irritation, invariably accompanies Neuralgia,—are the principal means by which recovery may be accelerated. General blood-letting, although rarely essential, will also sometimes operate as a valuable palliative or auxiliary. By unloading the brain, it, under certain circumstances, not only mitigates pain and tranquilizes the perturbation of the system; but increases its susceptibility to the operation of more powerful and permanent remedies. In this, as in all other cases connected with cerebral congestion, blood will obviously be drawn, with greater economy and more decided effect, from the temporal or jugular vessels than from those of the arm.

"The great principle in the *Essential Treatment* of Neuralgia, is to restore the equilibrium of circulation, by unloading the vessels of the cerebral mass, or removing their morbid condition; and by giving additional energy and impulse to the enfeebled action of the blood-vessels on the surface, and in the extremities of the body. This object, Depletives and Counter-irritants, as Blood-letting and Blisters;—the more powerful Alteratives, as Mercury, Belladonna, and Arsenic; and Tonics, as Cinchona, Iron, and the Shower-bath. or a judicious combination or succession of several of these agents, will most effectually accomplish." 250.

General blood-letting is seldom required in neuralgia—leeches and cupping being usually sufficient. An antimonial plaster to the back of the neck is very serviceable.

"*Of the Alterative Remedies* in Neuralgia, *Mercury* is, doubtless, the most powerful and

unerring in operation. Such, indeed, under ordinary circumstances, is the effect of this valuable agent that it will frequently accomplish the permanent removal of the disease, unaided by preliminary or consecutive treatment. Experience has, however, proved that, in the form of submuriate combined with opium, it exhibits an influence far more prompt and beneficent than when introduced only from the exterior by inunction, or internally without such combination. Calomel and Opium, in this as in several other morbid affections, appear to exert a peculiar—an almost specific—action on the system; which neither, separately administered, is capable of producing. Many instances are on record, wherein as soon as the mouth has decidedly evinced the constitutional influence of the mercury, the Neuralgic paroxysm has suddenly subsided never to return.* Tonics, although not absolutely requisite, may subsequently be administered to repair the loss of strength induced as well by the remedy as by the disease. In very old cases, and under particular circumstances, of Neuralgia, the mercurial treatment, however judiciously or resolutely tried, will prove unavailing.†—The *Belladonna*, recommended and employed with such confidence and apparent success, in Neuralgia, by Mr. Bailey, has not realized, in other hands, the expectations which the testimony of this enlightened practitioner was calculated to inspire. In some instances, its effect in protracting, or lulling the tortures of the paroxysm, has been prompt and conspicuously marked. But the writer has yet no experience of its perfect or lasting efficacy, in solitary employment. The sufferings of the patient have sometimes indeed been rather aggravated by the cerebral confusion and terror consequent on the use of Belladonna, than relieved by its sedative operation.—*Arsenic*, although by no means invariably successful, is probably more to be depended on, in the treatment of Neuralgia, than Belladonna. Many estimable writers have attested its efficacy when preceded or accompanied by other remedies. But no instance of its permanent success, without such previous treatment or combination, has, hitherto, been observed by the writer. After local bloodletting, blistering, and mercury, the Arsenical Solution may frequently be prescribed in Neuralgia, as in Chronic Rheumatism and Intermittent Fever, with great and lasting benefit. This, therefore, may be regarded as constituting the precise period at which a trial of the remedy is correctly indicated. Its effect will be rendered more prompt and decisive by combination with a vegetable tonic." 252.

On the class of tonics Dr. Palmer makes some useful remarks. He observes, that the operation of invigorating medicines will invariably be assisted by the previous unloading of the brain and bowels. The quinine and carbonate of iron have proved the best tonics in our author's hands—but the "perfect success of either of these agents, prescribed alone, the present writer has repeatedly heard of but never yet witnessed." Dr. Palmer is disposed to attach more importance to a division of the nerve, or rather the dissecting out of a portion of it, than is now granted to the operation. Some cases by Dr. Warren of America, published in another part of this Journal, will support Dr. Palmer's views. The operation is only admissible at two periods—*first*, when the pain is no longer tolerable and menaces the patient's

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* "See the evidence supplied by cautious deduction from numerous facts, in 'Observations on Neuralgia.' *New Medical and Physical Journal*, Vol. VII.

† "Two cases of Constitutional Neuralgia in which the writer depended on Mercury alone, were promptly and permanently cured by it. Of six other cases, wherein it was employed in combination with blood-letting, blistering, and other remedies, four terminated successfully;—one exhibited only temporary relief; and one yielded neither to this nor to any other treatment."

life—*secondly*, when the local symptoms, from morbid associations, or change of structure, continue after the constitutional derangement from which they originally emanated, has been rectified—and the consequence survives the cause.

"This argument may be strikingly illustrated by a reference to the peculiar and only circumstances under which the operation of *Tapping* can with propriety be recommended in Ascites, or Abdominal Dropsy, consequent on diseased liver. The two following cases, selected with this view, will require no comment. A middle-aged man, of intemperate habits, was attacked with ascites and general dropsy complicated with an enlarged liver. The usual remedies had been administered in vain. At length, the accumulation of fluid became so great as to cause by its mechanical pressure on the stomach and diaphragm, constant rejection of food, and alarming difficulty of respiration. *Unless relief had immediately been obtained, the poor fellow must have inevitably sunk.* In order, therefore, merely to gain time, tapping was proposed; and more than fifty pints of serum drawn away. The fluid re-accumulated with such rapidity that the operation was again twice performed to *avert impending danger ere effective constitutional remedies could be brought into action.* Brisk mercurial purgatives and inunction, tonics, and diuretics, meanwhile, were sedulously plied; and fortunately began to tell just as the man had abandoned himself to despair. In a few days, he was completely unloaded by the natural outlets; and, twenty years subsequently, he exhibited all the characters of vigorous old age.—In the spring of 1824, a young woman, labouring under abdominal dropsy, consulted the writer. Her countenance and history indicated the existence or effects of diseased liver. The Surgeon who had treated the case with great energy and judgment, declared an opinion that he had gone far to remove the cause; but that the consequences would obstinately resist, as they had already done, all constitutional treatment. The liver disease had, in fact, been well-nigh cured; but the load of accumulated fluid was so great that the oppressed absorbents could not be brought to operate upon it. *Here the consequence obviously survived the removal of the cause.* After a few unavailing efforts to stimulate the absorbents by Mercury and Diuretics, a large quantity of limpid yellow serum was drawn off by tapping; and the disease has never re-appeared." 256.

Here we must close our notice of Dr. Palmer's work. The title page—a "*popular*" work on medicine predetermined us not to review it at all, in conformity with our general custom. An examination of the book, (on account of the author's talents and character) convinced us that it was not at all adapted for popular perusal—or at least for popular comprehension—and the extracts which we have given will prove our judgment to be correct. Dr. Palmer *is* our personal friend—and *was* our former coadjutor in many a heavy day of literary labour. The profession will judge whether we have hesitated, on this account, to criticise—and that, even severely, when criticism appeared necessary. This is the way in which we treat our friends—and this is the way in which we wish to be treated by them in return. For the flattery of friendship and the abuse of enmity, we care about as much as AMRU, the MAHOMETAN GENERAL, cared for a certain gas which occasionally issued from the abdomen of the camel on which he rode. If Dr. Palmer possesses the mind which we believe him to possess, he will value this notice of his work in a proper light—and he will prefer a liberal and independent criticism to a fulsome panegyric. We advise him to give up all idea of *popularity*—to revise his work carefully—to address himself to his own *profession*, of which he is an honourable and distinguished member—and

finally, to seek "the bubble reputation," neither in the "cannon's mouth," nor in the ephemeral periodicals of the day, but in the sober, settled, and permanent opinion of his medical brethren, who are the only legitimate judges of professional merit.

II.

A PRACTICAL TREATISE ON ACUTE ABDOMINAL AND PELVIC INFLAMMATION; CONTAINING A COMPREHENSIVE CLINICAL VIEW OF INFLAMMATION OF THE STOMACH, BOWELS, PERITONEUM, UTERUS, &C. WITH A CERTAIN AND EXPEDITIOUS METHOD OF CURE. By *David Nicholas Bates*, Medical Practitioner. 8vo. pp. 136, London, 1829.

THE words "certain and expeditious," applied to the cure of such dangerous phlogoses as those of the abdominal viscera, raised some doubts in our mind—but these doubts were quickly dissipated by a quotation from the LANCET, vouching for the efficacy of the plan proposed by Mr. Bates. Knowing as we metropolitans do, the extensive practice, the experienced judgment, the accurate discrimination of our esteemed contemporary, Mr. Thomas Wakley—convinced that he would not hazard his well-earned reputation in the treatment of *inflammatory affections*, by vouching for any new practice before he had put it to the test of repeated experience, we took up the volume and read it through—partly in the regular vulgar way—partly in the way in which the great Napoleon declared he read the greater part of books—with his thumb. We shall now present our readers with all that is new—or thought to be new in this volume. To the classification which Mr. Bates has adopted we make no objection. The following passage is rather curious, and occurs at the very outset.

"Acute inflammation, seldom in this country, attacks the *substance* of the Liver, Spleen, Pancreas, or Kidneys, at least, to any great extent, *as there is not sufficient sensibility in these parts to support it;* it seems to require all the susceptibility of the delicate mucous and serous membranes, to enable this disease to develop its peculiar characteristics." 3.

After detailing the symptoms of peritoneal inflammation, according to the site of the disease, which symptoms are taken from the common stock-books of the day, Mr. Bates notices the different terminations—the last of which, "and one of the most common," he tells us is—death.

"It appears to me, from the consideration of these circumstances, that death, in this disease, is not *immediately* occasioned by any appreciable organic lesion; as this has been found, after death, to have existed, in one or more of the viscera, without producing an effect upon the general system, equal to its extent, and even without being suspected.

"There must, however, exist in the system, more or less of *constitutional irritation*, in every departure from healthy action, whatever may be the degree, or nature, of such morbid action; whether it be a disease, attended with the most acute and agonizing pain, or one that occasions the most trifling degree of uneasiness.

"*Constitutional Irritation* is known to exist, by the disturbance, more or less, of the vital, natural, and animal functions; and, more particularly, in that set of organs, in which the disease resides. In this unnatural state of the system, there is always a corresponding *general debility*, proportionate to the importance of the part attacked, its sensibility, the continuance of the morbid action, and the degree of *constitutional irritation* consequently existing.

"No morbid actions are attended with such remarkable constitutional irritation, as those which are productive of acute and continued *pain;* and none, therefore, more speedily bring the system into a state of extreme exhaustion. Even when natural actions are prolonged beyond the limits imposed by the laws of the animal economy, more particularly when accompanied with *pain, fatal exhaustion is the consequence;* for instance, the parturient female, who dies undelivered, when neither hæmorrhage, nor other untoward circumstances, has supervened, falls a victim to fatal exhaustion, *indirectly* induced by *pain.*" 31.

The foregoing doctrine leads directly to the novel (as is supposed) practice of our author. The treatment may be laid before our readers in a very short compass. It consists in a moderate abstraction of blood, if the patient's strength will admit of it, and when the disease is early seen—the administration of opium, either by the mouth or by enema—the horizontal posture rigidly maintained—and thin diluents, with strict abstinence.

The following extract will explain the enema plan, which, upon the whole, our author seems to prefer.

"The *first plan.*

"The HORIZONTAL POSTURE must be strictly enjoined to the patient, and persisted in, while any symptoms of the disease remain; not the slightest departure from it must be permitted, even for the purposes of natural relief; it is, therefore, necessary for the patient to be provided with a bed-pan. The practitioner must always bear in mind, that this position is the "*sine quâ non,*" without which, the remedies will be counteracted, and the cure of the complaint be frustrated, or protracted.

"The patient should lie on a soft bed, in order to encourage perspiration, as this is very favourable to the resolution of the disease.

"BLEEDING at the arm will be generally proper, when first called to a patient labouring under this disease, provided the strength will admit of it; but if there be great exhaustion, from the long continuance of the affection, from previous depletion, excessive vomiting, or purging, however the latter may be occasioned, the practitioner had then better refrain from blood-letting, and have immediate recourse to the opiate enema, which will next come under consideration. The quantity of blood taken, should not exceed a pint; and if the plan here generally recommended be adopted, it will not require a repetition. The buffy appearance of the blood, so often dwelt upon by authors, and considered by many medical men, as the grand test by which the danger of the attack can be estimated, ought not to influence the practitioner in the treatment of this disease: he must attend to the *violence of the pain,* together with the *vomiting,* or *purging,* if present, by which alone he will be enabled to form any thing like a just and certain prognostic; for it has often occurred to me, to see the blood exhibit no buffiness, when the symptoms left no doubt of the existence of most acute inflammation.

"The OPIATE ENEMA should be used immediately after the bleeding, or without it, if that evacuation be judged either unnecessary or improper; the following is the form and quantity found most convenient and efficacious:

℞. Tr. Opii 3j.—3ij.*
Decoct. Amyli Calefact ℥xij.
Mf. Enema quàmprimum injiciendum.

"The general effect of this in quelling the *pain*, *sickness*, and *diarrhœa*, if the latter be present, is almost instantaneous; the patient who, previous to its exhibition, had been writhing under the agonies of acute inflammation in the stomach and intestines, or peritoneum generally, with continual retching and vomiting, and perhaps diarrhœa, at once becomes calm and composed, and complains only of great tenderness in the abdomen, more particularly in that part which was the seat of the disorder. If there be no return of pain in twelve hours, another enema, containing not less than a dram of tinctura opii, should be exhibited, to prevent a return; but if there be a renewal of the primary symptoms, at whatever period, the quantity first used, may be again repeated. The tenderness of the body will be found to continue for a day or two, after the subsidence of the pain, but will gradually diminish, until it finally ceases. It will be necessary to confine the patient to the horizontal position, for not less than two days, after all the symptoms have disappeared." 37.

Directing cold water, or toast-water, as almost the only food as well as drink, Mr. Bates prescribes laxative lavements to relieve the bowels when confined—but not before the pain and sickness have been removed, and the tenderness of the abdomen somewhat abated. Leeches are also to be applied to the part, "where the tenderness chiefly resides," while warm fomentations, and even anodyne stimulant liniments are to be put into requisition. We must make room for another extract descriptive of the "SECOND PLAN."

"What has been said of BLOOD-LETTING, in the treatment just described, applies equally well in this.

"Instead of using the opiate enema, the following bolus is to be given:

℞ Pulv. Opii.
—— Antimonialis.
—— Acaciæ āā. gr. j.
Conf. Rosæ Caninæ q. s.

"Fiat bolus quàmprimum sumendus, in horâ repetendus, et binis horis continuandus, donec dolor cessat.

"If any one of the boluses be rejected by vomiting, another should be given immediately; as it is of consequence to ascertain whether the boluses be retained, the ejecta should be received into a white bason.

"By pursuing this plan steadily, it will be found, that the patient will gradually lose the pain and sickness, and from the fifth bolus to the tenth, become tolerably easy; sometimes the third or fourth bolus will have the desired effect; but if, from any untoward circumstance the tenth or twelfth bolus do not give decided relief, recourse must be had to the use of the opiate enema, as early as possible, as the longer the pain continues, the more likely is irreparable mischief to ensue." 43.

A number of cases illustrating the practice above-described, concludes the volume.

Mr. Bates, and the experienced editor of the LANCET do not seem to entertain the least question respecting the entire originality of this plan of

* "This is the quantity for an adult; not less than Tr. Opii 3j. should be used for the most delicate person of either sex: 3iss. or 3ij. may be employed when the patient is of a very robust constitution, or the symptoms very violent. The lesser quantity has generally been found sufficient."

treating abdominal inflammations. Yet if they could spare an hour or two from their excessive practice to "search the journals," as parliament men would say, they might probably stumble upon some papers containing doctrines and practices not very unlike what have here made a volume. At present we would only direct their attention to Dr. Armstrong's paper on the Use of Opium in Inflammation, published in the first—and we fear the *last* volume of the "Transactions of the Associated Apothecaries," some seven years ago. One short extract will suffice.

"So great indeed is my confidence in full doses of opium in peritoneal interitis, that if, compelled to say, supposing myself the subject of the disorder, whether I would exclusively rely upon them solely, or upon blood-letting solely, I should certainly fix upon the former; at the same time I should like to have the simultaneous influence of both remedies, being convinced, that they are far more serviceable combinedly, than separately employed." 315.

Mr. Bates indeed may attach great importance to some shades of difference between himself and Dr. Armstrong—such as the strict enjoinment of the horizontal posture—an injunction which common sense would enforce, without laying it down formally in print—the employment of opium in injections, as even preferable to an exhibition by the mouth—the *moderate* detraction of blood, &c.—but every candid man will say that these are mere modifications of the same principles and practice—and whether Mr. Bates' modifications are superior to those that have been recommended by Dr. Armstrong and others, can only, *as yet*, be pronounced by such luminaries as Mr. Wakley, whose talents and experience have long rendered him an ORACLE, on all practical points, among "medical practitioners" in this country.

The little work induced suspicions of something charlatanic about the performance; but we will do Mr. Bates the justice to say that we found nothing of the kind, on further examination. We have great doubts, however, as to the safety—and still more as to the efficacy of the practice advocated in the volume just reviewed. Of the dangers of abdominal inflammation we are as much aware as Mr. Bates can be—but we are not sure that this very limited depletion, (sixteen ounces of blood) and the masking of the symptoms by opium, may not sometimes throw practitioners off their guard till the disease has made a progress beyond the reach of medical art. After *copious* bleeding indeed, we have always advocated the administration of opium, particularly in combination with calomel—but this is a modification of great importance in the treatment of the disease under consideration, and the merits of the two plans must be left to time and future experience.

III.

A REVIEW OF THE DOCTRINE OF A VITAL PRINCIPLE, AS MAINTAINED BY SOME WRITERS ON PHYSIOLOGY. WITH OBSERVATIONS ON THE CAUSES OF PHYSICAL AND ANIMAL LIFE. By *J. C. Prichard*, M.D. F.R.S. &c.

Dr. PRICHARD has been long and favourably known to the public and to the profession by his great and first work on the varieties of the human race

and subsequently by strictly professional publications. The present performance is equally interesting to the general and professional reader; but the difficulty of the subject will probably render it less satisfactory than either of Dr. Prichard's former lucubrations. We are unable to afford space in this journal for a general review of the work, and shall content ourselves with an analysis of a couple of sections—fifth and sixth—entitled "*a Review of the Controversy respecting the existence of an Immaterial Principle or Soul—Metaphysical Argument.*"

Our ingenious author observes that the reasons adduced by philosophers in favour of the soul's existence, may be classed under two heads—metaphysical and inferential argument. The *former* consists, not in any attempt at demonstration, but of reasons derived from the nature of the human faculties and modes of thoughts—the *latter*, in argument by induction. The metaphysical argument is thus stated by Dr. Prichard.

"It has often been observed, that the whole sum of human knowledge may be divided into two departments, with reference to the channels through which it is acquired. The ideas, which belong to one of these departments, are originally acquired by perception, and through the medium of our external senses; those of the other class are revealed to us by our internal consciousness. The objects which are made known to us by the former, are the properties and affections of body or matter; those which are shown to us by the latter, are the operations of mind. It is self-evident, that all properties whatever, must, as metaphysicians say, *inhere in some substratum*, or, in other words, they must be the qualities of some essence or substance; they must belong to something. The essence, or entity to which the first set of properties belong, is by common agreement, termed body or matter; that to which the second class belong, is named soul, spirit, mind.

"It is a very important remark in this place, and in the argument which is to be stated, that of the two entities or substances now mentioned, matter and spirit, we have no knowledge whatever, except what is merely relative. We only know that such things exist, by inferring that they must exist, because their properties or attributes are perceived or felt. The essential nature of matter is utterly unknown, and the word means nothing at all, except that unknown substance to which certain known properties belong. Of mind or spirit we are equally ignorant, and the words mean nothing at all, but the unknown essence or substance to which another set of known properties belong. Algebraical symbols, such as *x* and *y*, would be just as expressive as these words, if there were only a general consent to use them for the same purpose. Those persons who have not been accustomed to examine accurately the limits of their knowledge, will not be prepared to admit that their ignorance is equal in these two cases. The remarks I have just made will, therefore, require some further illustrations.

"In the one case, indeed, I apprehend that there will be no hesitation or difference of opinion. All will be disposed readily to admit that we are quite ignorant of the essential nature of mind. Its properties or phenomena are made known to us by our consciousness, or internal feeling. These phenomena include all our intellectual operations, as perception, memory, judgment, or ratiocination, imagination, and the rest; all our emotions, grief, joy, pleasure, pain, passion; all the active propensities, or rather their conscious operation, belong to this part of our nature,

> 'Quidquid agunt homines, votum, timor, ira, voluptas,
> 'Gaudia.'

"These phenomena are perceived by us with the greatest degree of certainty, but we have no information respecting the nature or manner of subsistence of that part of our be-

ing by which they are witnessed, and of which they are affections. We term it, from some of its known qualities, intellect, mind or *mens*, meaning that which knows or understands." 40.

The less reflecting part of the community think they have a more distinct notion of matter, inasmuch as they handle and feel it, and appear to themselves to perceive its immediate contact with their hands and bodies. We cannot follow our learned author in his arguments to prove that we have, in reality, no correct or distinct notion of the real nature of matter. These arguments will be found between page 40 and page 47 of the work under review.

"If the preceeding observations are allowed to be well founded, we shall now be enabled to state in a plain and intelligible manner, the controversy between the materialists, who deny the real existence of mind or spirit, and those philosophers who maintain it. The proposition set up by the materialist is, that these unknown substances, which I have termed *x* and *y* are in reality but one and the same thing, though displaying two different sets of properties or qualities. This is denied by their opponents, who maintain that there are two distinct natures or entities, which, though sometimes brought into union, are essentially distinct from each other.

"1. The advocates for this latter opinion, who are termed Immaterialists, or Spiritualists, remark, in the first place that there is nothing, in the mode in which we become acquainted with these two classes of phenomena, that tends to favour the supposition that they belong to the same substance. On the contrary, we cannot contemplate them through the medium of the same faculty. One set of phenomena are only known to us, as I have already said, through the medium of our consciousness, or internal feeling; the other are objects of sensation and external perception.

"2. If we attempt to compare these two classes of phenomena with each other, in order to determine whether they are of the same kind, and may probably belong to the same entity, we cannot discover the most remote analogy between them. On the contrary, there results from the contemplation of the one class, a notion which is quite irreconcilable with a notion that results from the contemplation of the other class. We cannot subject matter and its attributes to our examination, without conceiving *it*, as well as the space which it occupies, to be in its nature infinitely divisible, or capable of separation and division without end. On the other hand, we cannot contemplate the phenomena of mind, or make the mental operations of which we are conscious the subjects of our reflection, without being irresistibly convinced that they belong to one being or thing, which is in itself absolutely indivisible. Our perceptions, recollections, thoughts, feelings, emotions of sorrow or joy, are all felt by us to belong to a self-same being, which we cannot, by the utmost effort of the imagination, fancy to be divided into parts, or separated. We feel and know it to be a monad, a single and indivisible being. This is the only instance in which the qualities of one of these natures or essences, can enter into any sort of relation with those of the other, and here they come into relation of contrast.

"These considerations are strongly in favour of the opinion that *x* and *y*, the entity to which the properties of matter and that to which those of mind belong, are distinct in nature. On the other hand, an attempt has been made, by a distinguished natural philosopher and a most subtle metaphysician, who may be considered as the greatest advocate of materialism in modern times, to prove that there is but one kind of substance or being in existence. The following is a short statement of his argument. We never witness the phenomena of mind, except in connexion with those of matter; therefere, the substance to which these two classes of phenomena belong, is one and the same. This is a clear and intelligible proposition, and deserves a careful examination. If the assertion con-

tained in it were established in its fullest extent, I do not perceive how, in the present state of our knowledge, we could avoid the inference. I shall cite the words in which this inference is drawn by Dr. Priestley, that I may not incur any risk of an erroneous statement.

"'The power of sensation,' he says, 'or of perception, never having been found *but* in conjunction with a certain organized system of matter, (he alludes to the brain and nervous system,) we ought, as philosophers, to conclude that this power necessarily exists in and results from that organized system, unless it can be shewn to be incompatible with other known properties of the same substance.'

"This proposition is expressed in terms too limited for the argument with which it is connected; but, if we may be allowed to put it into a more general form, it will amount to the following assertion. Mental phenomena are witnessed by us, only in connexion with organized systems of matter; or, to speak plainly, we nowhere discover the manifestations of mind, thought, consciousness, intelligence, except in connexion with brains. Unless the proposition has this meaning, it has no force whatever in the argument; and, if it is received in this general sense, it holds out to the Spiritualist a challenge, which he may very safely accept. He may observe that the whole universe displays the most striking marks of the existence and operation of mind or intellect, in a state separate from organization, and under conditions which preclude all reference to organization. 'The universal Mind,' says a distinguished philosopher,* 'though everywhere present, where matter exists, though everywhere moving and arranging the parts of matter, appears to do so without being united with matter, as in the case of visible, created beings.' There is, therefore, at least one being or substance of that nature which we call mind, separate from organized body." 52.

This consideration Dr. P. thinks, affords a sufficient reply to Dr. Priestley's argument.

"If the phenomena of mind can be discovered in one instance, in a state absolutely separate from organized matter, it is philosophical to conclude, when we find these phenomena connected and organized, with the properties of which they have nothing in common, that the connexion is accidental, or owing to some particular and temporary circumstances—and that it is not natural and essential."

In the sixth section of Dr. Prichard's work, the learned author takes up the second argument of those philosophers who contend that man is not *merely* a body, but a compound being, uniting a soul and a body. This second argument is inferential. It is an attempt to prove that the phenomena of mind cannot, in conformity with the results of universal experience, be derived from the properties of matter, whether organized or, in any imaginable way, modified.

"'In all combinations† whatever of material parts, it is found that the powers or properties of the entire system, are nothing more than the sum or aggregate of the powers or properties of the component parts. Figure, magnitude, and motion, (in which last are included attraction and repulsion,) are the universal powers or properties of material particles; and, from the combinations of material particles nothing has ever been known to result, but some modification of figure, magnitude, and motion.' It is, therefore, directly in opposition to the results of universal experience, to suppose that a combination of material particles can give rise to the phenomena, or constitute the operations peculiar to mind, or those feel-

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* "The late Professor Dugal Stewart."
† Belsham's Essays.

ings of which we are internally conscious. The contractions and lengthenings of cords or fibres, and the movements of fluid particles, will ever be something different in kind from the emotions of pleasure and pain, hope and joy.

"This is a very brief and summary statement of a proposition, which it would require some space of time fully to develop and explain. Some persons may, at first, be inclined to question whether it is true, in fact, that in all combinations of material parts, the properties of the whole are nothing more than a modification or aggregate of properties belonging to the parts. It may be observed that, in chemical combinations, the compound body has often different chemical properties from those which belonged to the substances of which it was compounded; and that pieces of machinery display mechanical powers, which could not have been looked for in their parts when separate. Powers which do not come under either of these denominations, are likewise found to result from a combination of materials which, separately, possessed nothing analogous to them. An Eolian harp, composed of pieces of wood and strings, emits musical sounds; and an electrical or galvanic apparatus displays its peculiar properties, which nobody could discover in single jars of glass, or plates of metal. The reply to these objections is as follows. In the first place, with respect to chemical compounds, it is remarked, that all the properties of chemical agents resolve themselves into modifications of one property, *viz.* that of chemical affinity, or the generic or elective attractions of particles of various kinds for each other. This one property, from which all the operations of chemistry result, is modified, and, with respect to particular substances, increased or diminished by chemical composition, but still nothing new in kind is acquired, or can be imagined to be acquired, by any chemical combination whatever. In like manner, the mechanical powers, which are the results of machinery or construction, may be explained, without proving that any power new in kind has been generated. The operations of which the entire system is rendered capable, are nothing more than the obvious result of the joint operations of all the parts, and it is brought about by the compounded agency of their weight, density, elasticity, and other previously existing powers or properties, combined and set into action under particular circumstances. In the instance again of the Eolian harp, or that of the electrical machine, though these instruments are compounded of materials which, by themselves, possessed neither musical nor electric properties, still nothing new is produced by the fabrication, because a new agent is in reality called into play. In the one case, the air in motion or wind, in the other, the electric fluid, displays by means of the machine its well-known properties, and produces, by its peculiar movements, in the one instance, an agitation of the atmosphere upon our ears, in the other, an electric shock. On the whole, it is, perhaps, not too much to conclude it to be an universal fact, that the properties possessed by any aggregates whatever of material bodies, are not different in kind from the properties of the parts from which such aggregates were compounded, but are all resolvable into them. The inference which philosophers have drawn from these premises, in proof of the existence of an immaterial principle of feeling and intellect, is sufficiently obvious. The human brain, which, in a certain way, is instrumental in the operations of the mind, can only be an inferior organ or auxiliary, assisting the mind in the performance of its functions, as a crutch or a pair of spectacles assists a man in walking or seeing. Mental phenomena, as thought, feeling, volition, cannot be affections of the brain itself, which is an organized structure, composed wholly of insentient and inert particles of matter, because the former are phenomena entirely peculiar; and because powers or qualities, so diverse from those of the component parts, are never, within the sphere of human experience, found to be produced by any combinations.

"To the apparent conclusiveness of this argument it has been objected, by some *metaphysicians*, that 'the Creator, being *omnipotent*, *could* endow material particles, in a state

of organization, with whatever powers it pleased him to bestow.' This is granted by the advocates of an immaterial principle, but then they make the following comment upon it. If the powers bestowed upon any system of parts were such as did not result from any possible modification or composition of the powers of the parts, the endowing such a system with new powers or properties, *can*, *apparently*, mean nothing *else* than the adding to it of some new thing—some new entity possessed of such properties, or to the nature of which they have some relation; and this is, in fact, the very supposition with which the Spiritualist or Immaterialist sets out, viz. that an immaterial principle of mind or intellect is superadded to the organized structure of the brain.

"I have thus endeavoured to give a summary of the arguments by which philosophers have endeavoured to establish the existence of a separate, sentient, percipient, or cogitative principle, distinct from the brain and nervous system, as well as from the whole organic structure of the body, but by the constitution of things capable at present of coming into relations with the external world only through the instrumentality of the bodily organs. How far these arguments are conclusive, I leave it to others to determine." 59.

We do not expect that these arguments will prove conclusive among determined materialists. The question is evidently insusceptible of proof either way. The Spiritualist cannot demonstrate the existence of a soul—the Materialist cannot disprove its existence. There is a consciousness within the human breast, almost universal, that man has something beyond the material organs of which he appears to be composed—and this consciousness is strengthened, if not confirmed by revelation. This all that need be said on the business in the present stage of our existence.

Wait the great teacher DEATH, and God adore.

IV.

ON POLYPUS OF THE UTERUS. By *Robert Gooch*, M. D.

[Diseases of Women, Chap. V.]

THE above is the only subject which we have left unnoticed in Dr. Gooch's valuable volume, and we now proceed to close our analytical labours, as far as the talented author is concerned—at least till he again makes his appearance on the literary stage, which, we hope, may be soon.

The experienced author believes that polypus of the uterus is a more frequent disease than is commonly supposed—and that those who, in extensive practice have not met with it, must have overlooked it. If mistaken and neglected, it occasions the death of the patient—if detected and removed, she lives and regains perfect health. The cure of polypus uteri affords one of the most striking instances of the triumph of art over the infirmities of nature.

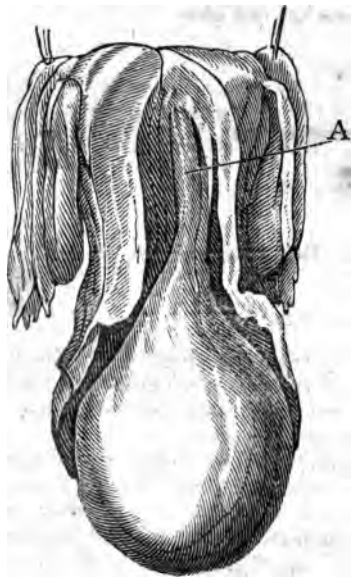
[1] "This disease is commonly for a long time mistaken for profuse menstruation, the patient instead of menstruating regularly and moderately, has frequent and profuse hæmorrhages from the uterus, and in the intervals a pale discharge. These gradually drain her circulation and injure her health, until she acquires the deadly paleness and suffers the complaints which are the ordinary effects of deficiency of blood. The absence of pain in the uterus or pelvis, (for there is often none, and never that degree which attends the

malignant diseases of this organ,) leads to no suspicion that the hæmorrhages depend on a disease of structure. Tonics and astringents are given in various forms; one practitioner is consulted after another, till at length the uterus is examined, and a polypus is discovered. This is the history of most of the cases which I have met with.

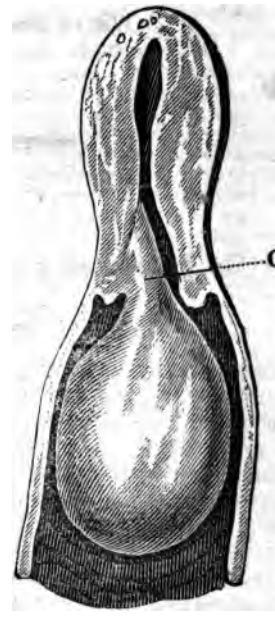
"A polypus of the uterus, when discovered, is a tumour in the vagina attached to some part of the uterus. It is round, smooth, firm, and insensible; it is quite unattached to the vagina, so that the finger can be passed round between the walls of the vagina and the surface of the tumour; but if traced higher up, it is found to terminate in a narrower part or stalk. This stalk is differently attached in different cases; in some it passes through the orifice of the uterus into its cavity, and is attached to the fundus of this organ; in others, it passes into the cavity of the neck, to one side of which it is attached; in others it does not enter the orifice, but is attached to one portion of its edge or lip; hence a distinction of polypus of the fundus, polypus of the neck, and polypus of the orifice. This distinction must not be lost sight of, for it is of practical consequence. In ascertaining the nature of the tumour for the purpose of determining the propriety of removing it by an operation, the mode of its attachment is one of our chief guides; and in this respect what is true of polypus of the fundus, is not so of polypus of the neck or lip.

"In polypus of the fundus the stalk is completely encircled by the neck of the uterus, and if the finger can be introduced into the orifice, it passes easily round between the stalk of the polypus and the encircling neck.

"In polypus of the neck the finger cannot be passed quite around the stalk; it may be passed partly round it, but it is stopped when it comes to that part where it is attached to the neck, the stalk is only *semi*-circled by the neck.

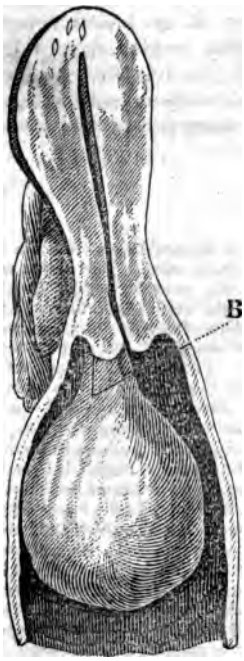


A Polypus of the *fundus*, its stalk growing from that part of the uterus, its body down in the vagina, the lower part of its stalk surrounded by the orifice of the uterus.



C Polypus of the *neck* of the uterus, its stalk growing from the cavity of the neck, and consequently only semi-circled by the orifice, its body down in the vagina.

"In polypus of the edge of the orifice or lip, the stalk does not enter the orifice, but grows from the edge of it; it feels as if a portion of the lip was first prolonged into the stalk, and then enlarged into the body of the polypus. It is important to remember that there is a polypus, the stalk of which is not encircled by the orifice of the uterus; if it grows from the orifice it cannot be encircled by it." 254.



When a polypus grows within the uterus, it dilates its cavity, neck, and orifice, as in pregnancy. The orifice is a round space, with thin edges, as in somewhat advanced pregnancy, instead of having a projecting part of the neck forming a narrow chink in a firm thick nipple. In polypus of the neck and that of the lip, the projecting part of the uterus preserves more of its ordinary form and consistence.

"The internal structure of polypus in most cases, exactly resembles the internal struture of the *large white tubercle* of the uterus, commonly called the fleshy tubercle; 'so that a person looking on a section of the one and the other, out of the body, could not distinguish between them.' They are the same disease, differing only in the seat and mode of their attachment, and consequently in the symptoms which they produce. On cutting into them we see a hard whitish substance intersected by membranous partitions. This, however, is not always its structure, it is sometimes of a much softer and looser consistence, and sometimes has considerable cavities." 255.

B Polypus of the *orifice* or *lip* of the uterus; the orifice on the front of the stalk, and not at all encircling it, the body of the polypus down in the vagina.

The external covering of the polypus is the internal covering or mucous membrane of the uterus. When the patient is cured by the removal of the polypus, it comes away in a putrid state, unfit for a minute anatomical examination; but sometimes the patient dies before the nature of the case is discovered, and then the tumour can be examined attached to the body and unchanged by an operation.

The size of polypi differs very much in different cases. Dr. G. has removed several as large as the head of a new-born child; but they are commonly of a much less size, and he has known several cases where frequent hæmorrhages were occasioned by a polypus not larger than a filbert, attached just within the cavity of the cervix. The hæmorrhage ceased on the removal of the polypus.

Thus then a polypus of the uterus is commonly a round insensible tumour, growing by a stalk from the fundus, cervix, or lip, in its inner structure like a fleshy tubercle—on its outside covered by a mucous membrane of a pale flesh colour, streaked with veins, and occasioning frequent hæmor-

rhage from the uterus. When the polypus grows from the fundus of the uterus, it is at first very small, resides within the cavity of this organ, and, for sometime occasions no uneasiness or disturbance in its functions, that might lead to suspicion of its existence. But as the polypus grows larger it gradually dilates the uterus, till at length this organ, stimulated by its bulk, begins to contract upon it, protruding it through the dilated orifice. It sometimes passes through the orifice gradually and insensibly—sometimes suddenly during the action of the bowels. Dr. G. has known several instances where retention of urine has followed this sudden descent of the polypus, from compression of the urethra. While the tumour remains within the uterus, it cannot be felt in a common examination, and the nature of the disease is generally overlooked. The following is a striking instance, which we shall give in the author's own words.

"A lady who had been subject to frequent and profuse hæmorrhages from the uterus, had consulted two eminent practitioners in Edinburgh, without relief. The uterus was examined but no change of structure was discovered. As she passed through London on her way to the continent, she consulted me. I examined the uterus, and discovered nothing. She went to Rome, and then to Geneva, at both which places she consulted some of the most eminent practitioners, by whom the uterus was examined, but nothing was discovered, excepting that it was rather larger than natural. Thus far the disease was considered as common menorrhagia. After being absent from England a year and a half, she returned to London worse than when she went. A few days after her arrival, she had a recurrence of the hæmorrhage, but it was attended by an unusual symptom; the blood came away in large coagula attended with bearing down pains. As soon as the hæmorrhage had ceased, I advised her to allow me to examine the uterus, though I little expected what I was to find. She consented, and the next morning I visited her at her hotel before she was up. As I passed my hand under the bed-clothes, I said I fully expected to find nothing, yet the next instant I had my finger on a polypus; it was about the size of a large walnut, with a slender neck encircled by the orifice of the uterus. It was easily removed, the hæmorrhages have never returned, and she has since enjoyed perfect health. There can be no doubt that the polypus was expelled into the vagina during the pains which attended the last hæmorrhage, and that I had the rare good luck to examine almost immediately after the tumour was discoverable. If I had examined before those pains, I should have overlooked the disease, as I, as well as her attendanls at Edinburgh, Rome, and Geneva, had done before." 260.

When polypus of the fundus descends into the vagina, the stalk drags downwards that portion of the fundus to which it is attached, so that, in this stage of the disease, it is generally complicated with some partial inversion of the uterus. An inattention to this important fact has led to fatal consequences.

"When a tumour supplied with vessels, and consequently capable of bleeding, grows from an organ so subject to bleed as the uterus, it is difficult to demonstrate whether the hæmorrhage arises from the tumour, or from the uterus. The strong reason for attributing the hæmorrhages to the tumour, is this. As soon as a ligature is applied, and tightened round the stalk, the hæmorrhage from that time ceases, although it may be several days before the tumour comes away.

"It was an opinion of M. Levret, that a polypus did not bleed whilst it remained within the uterus, but that after its expulsion into the vagina, the orifice of the uterus, by constricting its stalk, impeded the return of blood in its veins, which consequently burst and

bled profusely. This opinion, however, is contradicted by the foregoing case, as well as others which I shall have occasion to relate: a polypus of the neck or of the orifice of the uterus projects from the beginning into the vagina, consequently it does not undergo that expulsion from the uterus, which takes place in polypus of the fundus, and is capable of being detected from its commencement." 261.

The diagnosis of this disease is a matter of greater difficulty than the treatment. When once detected, any surgeon, with a proper instrument, is competent to remove it. But the case is frequently misunderstood, and our author has known the most experienced practitioners hesitate about the nature of a tumour when detected, and consequently, about the propriety of removing it.

"As tumours are often found in the vagina, which somewhat resemble polypus, but which are very dissimilar in their nature and treatment, it is important to learn the marks by which they may be distinguished. The tumours, which are likely to be mistaken for polypus, are, 1. the prolapsed uterus; 2. the inverted uterus; 3. malignant excresences from the uterus.

"It is not likely that any man of moderate knowledge and experience should mistake prolapsus for a polypus of the uterus. In prolapsus, the tumour has at its most depending part a palpable orifice, that of the uterus, into which a probe or bougie can be passed several inches; the tumour is sensible, so that if pricked or scratched the patient feels it; the tumour grows broader the higher the finger is passed, and it cannot pass high, for it is soon stopped by the angle where the vagina is attached round the uterus. The higher the tumour is pushed the easier does the patient become. In all these particulars the polypus is just the opposite; it has no orifice, it is insensible, so that if pricked or scratched the patient does not feel it; the finger can be passed very high, and the higher it is passed the narrower becomes the tumour; the higher the tumour is pushed, the more uneasy becomes the patient. I have seen many cases of this kind which gave occasion to doubts, but never one in which it become a question whether the tumour was a prolapsus, or polypus of the uterus.

"Inverted uterus being a rarer occurrence, is less likely to be met with, but when it is, is more likely to be mistaken for polypus. When the uterus is only partially inverted, that is, when its fundus only is drawn down through its orifice into the vagina, and the patient has survived for many months, the tumour feels exactly like a polypus of the fundus. The distinguishing marks are the time of its first appearance, which must have been immediately after delivery, and its sensibility. In the smoothness of its surface, the roundness of its body, the narrowness of its neck, and its being completely encircled by the orifice of the uterus, it sometimes exactly resembles polypus of the fundus, of which the following case affords an example.

"The first time I saw the patient was in consultation with Dr. Clarke and Dr. Henry Davies; she had been delivered some months before at St. Omer, and immediately after the removal of the placenta, which had been extracted with some violence, a tumour had been felt projecting from the uterus into the vagina, since which she had not only had no hæmorrhages, but had not even ordinary menstruation. When we examined the tumour, we found it about the size of a small apple with a smooth surface, a somewhat narrow stalk, which was completely encircled by the orifice of the uterus, exactly like a polypus, but its quick sensibility to touch and the circumstances under which it made its first appearance, inclined us to believe that it was an inverted uterus, and not to recommend its removal, particularly as she was losing no blood, and her health was sustaining no injury from it. She returned to the continent, and I did not see her again for two years, when she again came to London, to place herself under the care of Dr. Granville, who had rec-

ommended her to submit to an attempt to revert it, and I now saw her in consultation with the doctor. Since my former interview with her, she had become subject to frequent and profuse hæmorrhages, which had bleached her face and broken her health, and it now became an urgent object to afford her relief even at some risk. We agreed, therefore, that the attempt should be made to revert the tumour, but if this failed, which appeared most likely, we proposed to her husband the removal of the tumour by the ligature, stating to him that such an operation had been done successfully, but that it was attended with considerable risk. This both he and the patient were willing to incur; the attempt at reduction failed, but before applying the ligature, her former attendants, Dr. Clarke and Dr. Henry Davies, were consulted, and all of us agreeing to recommend the operation, the ligature was applied by Dr. Clarke; it was tightened every other day, and each time occasioned so much pain as to require a large opiate to quiet it. At length, on the fourteenth day both instrument and tumour came away; there were times when I had a strong suspicion that it was a polypus, but a sight of the tumour proved that it was the fundus of the uterus, for it was a hollow cup, the size of a small apple, in the cavity of which could be seen the fallopian tubes. Excepting the pain and some vomiting, the patient had no bad symptoms during the progress of the cure, and several months after her husband called on me to say she was quite well." 266.

A more frequent subject of doubt is, whether the tumour which projects from the uterus into the vagina be a common polypus that admits of removal and a permanent cure, or a malignant excrescence which, if removed, grows again and terminates fatally. On this point, Dr. Gooch speaks more particularly in the second part of the paper on "some unusual Forms of Polypus," to which we shall come in due time. All that he remarks here is this —that "whenever the tumour has a stalk which can be included in a ligature, without danger of including the neck or fundus of the uterus, he would apply it." It succeeds in an immense proportion of cases.

"If polypus of the uterus is overlooked or neglected it ultimately destroys the patient. Frequent hæmorrhages drain the circulation to the lowest point compatible with life, till at length a fresh hæmorrhage occasions a fainting fit or convulsions, in which the patient dies. It is a practical rule, therefore, of vital importance, that whenever hæmorrhages from the uterus resist the ordinary means, the nature of the case should be certified by examination. I have heard of several fatal cases from a neglect of this rule, and many are recorded in books.*

"When hæmorrhages from the uterus arise from a polypus, medicines are useless. The only effectual way to cure the hæmorrhages is to remove the polypus. This may be done either with the knife, as is practised at Paris, or by applying a ligature round the stalk, and tightening it until the tumour falls off. I have never used any other means than the latter, and as it has served me successfully for many years, and in numerous cases, so that I wish I had as good cure for all diseases, I shall not abandon it for the knife, which, if I may judge from cases which have been related to me, is not always so safe and successful.

"It may be easily supposed, and if an attempt is made, it will soon be found, that to pass a ligature round a tumour, situated in a deep and narrow canal like the vagina, is not an

* "See Dessault's surgical works, edited by M. Roux, vol. iii. Memoires sur les Polypes. Medico-Chirurg. Journal and Review, for December, 1816. Levret, sur les Polypes de la Matrice, p. 180."

easy task without an instrument adapted for the purpose.* That which I use consists of two tubes, capable of being separated and joined, and was originally contrived by a German surgeon, of the name of Niessen, but has since undergone many changes in the hands of different surgeons, especially Levret. A representation of its latest form has been copied from Richter's System of Surgery into Mr. Samuel Cooper's First Lines of Surgery. In this sketch the two tubes are curved, to correspond with the curvature of the vagina and sacrum.

"In this instrument I made two changes, the principal one consisted in making the tubes straight instead of curved, the latter form I found unnecessary even with the largest polypi; and it was liable to this great inconvenience, that when the tubes had been passed round the polypus, so as to meet again on the opposite side, if the upper extremities deviated in the slightest degree from each other, (an accident which it was almost impossible to prevent, and which took place notwithstanding their lower extremities were perfectly parallel,) it was impossible to slip up the cross part which was to join them together. On the contrary, if the tubes were straight, it was necessary only to keep the lower extremities perfectly parallel to insure a similar apposition of the upper, and the cross part could be slipped up without any difficulty.

"The instrument which I use for this purpose, and which in numerous cases has assisted me easily through the operation, consists of two silver tubes, each eight inches long, perfectly straight, separate from one another, and open at both ends. A long ligature, consisting of strong whip-cord, is to be passed up the one tube and down the other, so that the middle of the ligature passes across from the upper end of one tube to the upper end of the other, and the two ends of the ligature hang out at the lower ends; the tubes are now to be placed side by side, and, guided by the finger, are to be passed up the vagina, along the polypus, till their upper ends reached that part of the stalk round which the ligature is to be applied; and now the tubes are to be separated, and while one is fixed, the other is to be passed quite round the polypus till it arrives again at its fellow tube, and touches it. It is obvious that a loop of the ligature will thus encircle the stalk. The two tubes are now to be joined, so as to make them form one instrument; for this purpose two rings, joined by their edges, and just large enough to slip over the two tubes, are to be passed up till they reach the upper ends of the tubes which they bind together immoveably. Two similar rings, connected with the upper by a long rod, are slipped over the lower ends of the tubes so as to bind them in like manner; thus these tubes, which at the beginning of the operation were separate, are now fixed together as one instrument. By drawing the ends of the ligatures out at the lower external ends of the tubes, and then twisting and

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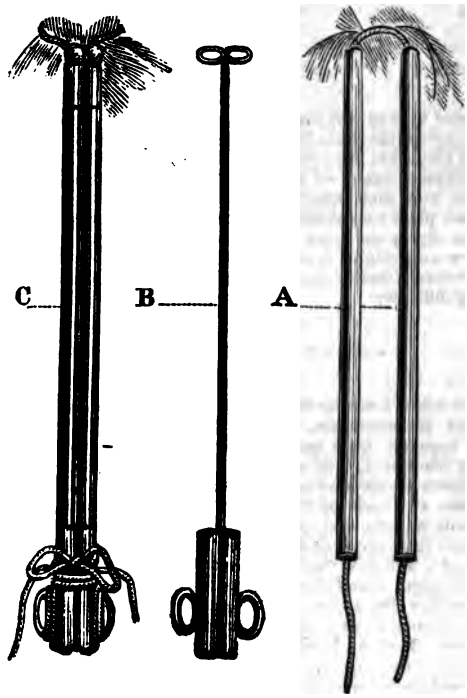
* "How difficult this operation sometimes is if not facilitated by some mechanical contrivance may be seen in the cases published by Dr. Denman. He describes himself, Case the 4th, as making many and strenuous attempts to pass the ligature without success. At length the ligature was applied, but the patient died before the polypus came away, and appears to have been lost from the unsuccessful attempts of the operation. In Dr. Hunter's museum there is a large polypus, with the statement that after many attempts to pass the ligature the patient died. (See *Denman's Midwifery*, vol. i p. 100.")

tying them on a part of the instrument which projects from the lower rings, the loop round the stalk is thereby tightened, and, like a silk thread around a wart, causes it to die and fall off.



A The two silver tubes armed with the ligature, and applied to that part of the stalk which is to be encircled by the ligature; one tube a little separated from the other on its way round the polypus to meet its fellow tube on the opposite side.

B The rings which bind the tubes into one instrument, the upper and lower joined together by a long silver rod; on the lower the projection or shoulders.

C The two tubes joined together by the upper and lower rings; at the *upper end* a loop of the ligature round the stalk; at the *lower end* the ends of the ligatures twisted round the shoulders of the instrument.

"The instrument being thus adjusted is to be left, but the ligature every night and morning is to be untwisted from the shoulder of the instrument, drawn tighter, and then fixed again round the projecting part, and this is to be done morning and night. As the instrument projects out of the vagina, if the patient was, whilst turning from side to side, to sit down upon it, she might impale herself on it; an accident, which I have heard once took place, and terminated fatally. To prevent this, the late Dr. Clarke, contrived a round flat wooden shield, which is fixed to his instrument so close to the outer orifice that even if the patient was to sit down on the instrument it could not be thrust higher in the vagina. I have always satisfied myself with making the patient understand the necessity for care in turning, but such a guard could easily be adapted to my instrument; if the projecting part or shoulders were made two inches broader, they would answer the purpose." 273.

The only danger attendant on the operation is, that the ligature may include a portion of the uterus. In one of Dr. Denman's operations of this kind, pain and sickness quickly followed the application of the ligature—and as soon as the latter was slackened, these symptoms ceased. They were again renewed whenever he attempted to tighten the ligature. The patient died about six weeks afterwards, and, on opening the body, it was discovered that the uterus was inverted, and that the ligature had included the inverted portion. Mr. Abernethy relates in his lectures several cases, where women had died from the ligature of polypus uteri. The same accident happened in the practice of Dr. William Hunter, and he relates it as a warning to others.

III. *Case.* A poor woman, about 40 years of age, was received into Bartholomew's Hospital, having been delivered by means of the forceps six months previously. She had now a tumour in the vagina, which protruded in the perpendicular posture, but was easily returned. It was as large as the head of a new-born infant, and was attached by a stalk, nearly as thick as the wrist, to the usual seat of the cervix uteri. The orifice of the uterus could not be felt. The tumour was of a pale flesh-colour, had a knotty surface and felt firm. The patient had a profuse colourless discharge, but she had no hæmorrhages, and had for some time ceased to menstruate. The ligature was applied round what was supposed to be the stalk of the tumour. It occasioned little pain when first applied, but, towards evening it became so severe as to resemble labour. This was relieved by an opiate and she passed a comfortable

The most convenient mode of preparing the instrument for the operation. *A* the two tubes armed with the ligature ready to pass up to the stalk of the polypus, and still separable so as pass round it. *B* the upper and lower rings, connected by a silver rod, already slipped up over the long outer ends of the ligature, and ready to be slipped up over the two tubes as soon as they have been passed round the polypus, so as to encircle the stalk with the ligature; the ends of the ligature made into a knot, to prevent this part of the instrument dropping off during the operation.

night. Next day the pain increased, extending up the loins and down the limbs. The ligature was tightened every day, with a recurrence of the pain, requiring an opiate. The tumour became livid and the discharge fetid. On the seventh day a violent hæmorrhage came on, accompanied by death-like faintings and cold sweats. The hæmorrhage was arrested by local astringents, and the fainting relieved by brandy and ammonia. But the symptoms, though mitigated, continued, and she died on the fifteenth day after the operation. On opening the body, the uterus was found of its natural size and structure—the tumour grew from the orifice of the uterus all round, so as to be continuous with the cervix, and so as to cover the aperture of the uterus, and make it impossible to say where the neck of the uterus ended and stalk of the tumour began. The ligature had been applied so high as to include the projecting neck of the uterus—the posterior part of it had occasioned ulceration into the cavity of the peritoneum, in which there was an aperture of about an inch in extent. The inner structure of the tumour was similar to that of fleshy tubercle—there was no inflammation of the peritoneum.

The danger of including the uterus in the ligature may be avoided, Dr. Gooch thinks, by attention to the following rules.

"1st. Instead of aiming at passing the ligature as high as possible on the stalk, to pass it as low as possible, taking care to pass it over the body of the tumour. It is true by these means a portion of the stalk will be left above the ligature; but I know by experience that it does not grow again; like the remnant of the umbilical chord, it dies and falls away. These tumours have little life, and die above as well as below the ligature. By a case, which I shall soon relate, it will be shown, that this is not a matter of probability, but of certainty. 2d. When the stalk grows from the cervix, if the os uteri can be felt, it will be the best guide where the neck ends and the stalk begins; the ligature ought to be applied a little below the orifice, but if it cannot be felt, the next best guide is the ordinary length of the projecting part of the neck, that is, about two thirds of an inch. When the polypus is very large, and the vagina closely contracted, it is difficult or impossible to reach the stalk and the cervix, so as to make any thing like an accurate measurement, and the first rule only is practicable. 3d. To attend to the sensations of the patient when the ligature is tightened; if it gives much pain, there is every reason to believe that it has included a part of the uterus." 278

It generally requires from two to ten days for the ligature to make its way through, being tightened night and morning. The discharge becomes more fetid from day to day, and demands great attention to cleanliness. The operation is generally successful—and a disease which has resisted remedies for years is removed in a week. The hæmorrhages which had lasted so long and occasioned so much debility, suddenly cease—and the patient rapidly recovers her health. Sometimes, however, this requires to be assisted by tonics and the usual restorative medicines. It has been supposed by some writers that a ligature could not be applied to a thick-stalked uterus; but this, our author avers, is a mistake. He has repeatedly applied the ligature to very thick-necked polypi, with no other inconvenience than that the ligature was many days in making its way through.

Several cases in illustration are related by Dr. Gooch, and then he makes some observations on certain excrescences—more especially the cauliflower excrescence—which grow from the uterus, and are liable to be mistaken *for polypus*. The author comes to the following practical conclusion.

"That these fungous excrescences described by Levret, Herbiniaux, and Dr. Clarke, which I have found in the uterus and in the vagina, and which agree in these leading properties, that instead of a dense firm substance they are of a spongy or vascular structure; that if removed they grow again and kill by producing frequent and profuse hæmorrhages; are only the same growth in different parts of the genital cavity, and are specimens of the same disease which, in other parts of the body, is best known in this country under the denomination of the bleeding fungus or fungus hæmatodes.

"In all these cases of fungus excrescence in the vagina, the best practical rule I believe to be this; whenever the form of the excrescence is such that the whole can be removed by a ligature, without including any portion of the uterus, apply it, distinctly stating to the patient or her friends that it is not done with the same confidence of success as in a common polypus, but as the only remedy which gives the patient any chance of life, and if it fails by the excrescence growing again, it does not render the case worse than it was before.

"I do not believe that any man can tell infallibly by touch whether a tumour in the vagina is a malignant excrescence, which is to grow again, or a benign one, which, if removed, will never return. A rough uneven surface is no test. The polypus described in Case No. III. which turned out to be a common polypus in structure, and which would have been successfully removed if the ligature had been applied an inch lower, had a rough surface; and I have successfully and permanently removed tumours which, because they had uneven surfaces, had been judged by other practitioners to be malignant excrescences. It is a prevalent notion among medical men, that these malignant excrescences are far more common than they really are. Among the cases about which I am consulted, especially from the country, in which disease of structure is apprehended in the uterus, no one is so often named as the cauliflower excrescence. If the surface of the tumour or even the neck of the uterus is a little irregular, if blood follows an examination, and the patient states that she has a watery discharge, by which she means little more than that it is colourless, all which are common occurrences in the diseases of structure in this organ, the case is sure to be set down as cauliflower excrescence. If these suspicions were accurate this disease would be the most common of the diseases of this organ, yet, the fact is, that it is the most rare. Where we see one case of cauliflower excrescence we see ten or even twenty of common polypus and fifty of carcinoma or malignant ulcer of the uterus." 309.

We have now given a very full analysis of every article in Dr. Gooch's volume, with the exception of a long one at the end, re-published from the Quarterly Review—and which is itself a review of the long-litigated subject of the plague. It is a very clever article; but we think Dr. Gooch might have allowed it to remain anonymous where it was first published. It was rather foreign to our author's usual professional pursuits; but it shews that a man of talent and erudition may write well on a subject of which he has no personal or practical knowledge. We need not add to the approbation which we have so often expressed of Dr. Gooch's work. We have reason to know that a large edition is exhausted already, and we can have no doubt that it will become a standard publication in the library of every respectable practitioner, whether physician or surgeon, or both.

V.

A LETTER TO THE PUBLIC, ON THE NECESSITY OF ANATOMICAL PURSUITS, &c. By *Corden Thompson*, M. D. 8vo. pp. 92, 1830.

DR. THOMPSON, in this little pamphlet, which is dedicated to the Marquess of Lansdowne, has evinced great learning and research, together with much keen and critical acumen. But we may remark that, to the medical profession and to the more enlightened and liberal classes of society, such a laboured production, in proof of the utility of dissection, is unnecessary—to the narrow-minded and bigotted, it would carry no conviction, because their hearts are hardened, and their brains are insensible—while to the vulgar, the whole epistle would be Hebrew. But what is more mortifying than all to authorship, such erudite essays, on such a subject, will not be read, by any member of society, in or out of Parliament—not, at all events, by one in a million, which would make about 27 readers in England, Ireland, and Scotland. We know indeed that Dr. Thompson will be able, in the course of 1830, to produce more than 27 proofs of the incorrectness of this assertion, in the shape of letters from the Marquess of Lansdowne, and many others, full of compliments, and full of asseverations as to the pleasure received during the perusal of the letter; and we are really sorry to disturb the pleasure which the receipt of congratulatory letters is calculated to convey. But some knowledge of the world, and some intercourse with its motley inhabitants, have taught us a few secrets on these points. The dissection of human bodies is dirty work at the best, and nothing but the love of *anatomical* science can ever render it bearable, much less pleasing. This love will never be generally diffused among mankind at large, even by the eloquent harangues and lectures of Dr. Birckbeck. They are so much occupied with the things of this world—eating, drinking, and money-making—and so enamoured with the prospect of their carcases taking on angelic forms, at the resurrection, that they never will bear the idea of dismemberment by the uncleanly hands of the anatomist. The following extract from the letter before us affords a tolerably convincing proof of the justness of these observations.

"What, then, must we candidly think of those legislators who have joined the popular outcry against dissection? Do they, with the vulgar, suppose that it consists simply in cutting and hewing to pieces? Do they never think of it except in connexion with a bloody knife? It would really seem so. The reverend gentlemen in lawn appear not to have forgotten the epithet applied to Herophilus by Tertullian.* To account for their conduct, we are compelled to suppose, that they regard practical anatomy as a sort of impious mangling of the dead; a species of butchery which, possibly, with a pious horror, they wish again to see *banished from our universities*. A very fine specimen of this sort of feeling has lately been displayed by a *Divine* of the Scotch Church. Mr. Pollok,

* "Herophilus ille, medicus aut *Lanius*, qui Sexcentos exsecuit ut naturam scrutaretur." ED.

in his operose production on the 'Course of Time,' speaking of the resurrection at the last day, thus introduces the anatomist:—

> " And as the anatomist, with all his *band*
> Of *rude disciples*, o'er the subject hung,
> And *impolitely* (!) *hewed his way*, through bones
> And muscles of the *sacred* human form,
> *Exposing barbarously to wanton gaze*,
> The *mysteries of nature*, joint embraced
> His kindred joint, the *wounded flesh* grew up,
> And suddenly the *injured* man awoke,
> Among their hands, and stood array'd complete
> In immortality—*forgiving scarce*
> The *insult* offered to *his clay* in death."

" The preceding is *one* only of the *numerous* instances of wretched taste and ponderose diction with which this admired (!!!) writer abounds. But the taste of the multitude consists in having *no taste* at all. There never was, we will venture to affirm, a more complete example of the *Bathos* in writing than the one now cited. 'The anatomist with his *rude band impolitely hewing his way through bones and muscles*:' aye! bones and muscles of the *sacred* human form! *Hic labor, hoc opus est!* But to worms and other vermin it is quite a delightful and recreating amusement to find their way through these parts, *sacred* as they are in the poet's eye. And then, to *expose barbarously to wanton gaze the mysteries of nature!* Horror of horrors! Execrable wretches! What! strip nature naked, and expose her to the wanton gaze of a rude band of dissectors? Proh pudorem; And again; only think, the poor *injured* man, after the resurrection, scarcely can *forgive* the *insult* offered to *his clay* in death! What an elevated and sublime idea! How truly Christian like!! Now, suppose he had found a thousand revelling worms at work; or a huge fish tearing off a limb; or a wild beast picking a bone;—would he have forgiven these creatures? And, after all, we dare say the numerous readers of this Scotch Milton (!!!) find a *comfortable* strengthening of their prejudices in perusing this pitiable nonsense; for pitiable, indeed it is, when we recollect the concise and animated language of Paul. Yet, be it remembered, this linsy-woolsey stuff is from the pen of a divine in the 19th century; from one who talks about the 'unfallen, holy, religious sea!' How forcibly does it remind us of *Merops* in Lessing's fables. The reader will excuse our translating it for him:—

" I wish to ask you a question, said a young eagle to a very sage and learned owl. " There is a bird, they say, called Merops, which, when it rises in the air, flies with the tail foremost, and the head towards the earth. Is this true?" " Nonsense, child!" answered the owl; " this is a mere silly fiction of *man*. Perhaps *he is himself such a kind of Merops*, for he is always *trying to fly up to heaven, but never by any chance loses sight of earth!*" 51.

If reverend divines will thus aid in fostering the prejudices of mankind against the practical study of anatomy, what can we expect from those who have no liberal education?

But medical science, or, at all events, the major mass of its professors, is menaced with a greater evil than the difficulties attendant on dissection. Bodies will be procured in greater or less abundance, by money, whenever they are wanted. We have the authority of Sir Astley Cooper, before a Committee of the House of Commons, that any man's body may be brought into the dissecting room, by that potent agent gold. There is a far worse prejudice against the profession rapidly engendering in the public mind, which their passions have not, for some time past, permitted them to perceive, but which their pockets, and their sober judgment are now beginning

to feel. The scandalous and abusive language introduced into medical politics, and carefully doled out by REPORTERS in the daily newspapers, has created an unfavourable impression in the public mind against the whole profession of medicine! A general distrust, we might also say *contempt* prevails, against the medical character, and, if things went on as they have lately done, we should not be surprised if the character of medical practitioners in this country fell to the level of that in Spain—where a barber would consider himself disgraced, if his daughter married the son of a physician! We happen to know something of the prevailing sentiments among the non-professional as well as professional public; and we venture to affirm that confidence in the integrity of the profession is rapidly waning—and the consequence is, and will be, that all classes of society will avoid, as much as possible, communication with medical practitioners, while those in affluent circumstances will only have recourse to men whose reputation and character place them beyond the reach of suspicion.

How can it be otherwise?—Custom has introduced two or three classes or distinctions in the practice of medicine. Modern medical tactics have introduced the plan of setting one class in opposition to the other, and of employing the most disgraceful and Billingsgate language in these collisions! The consequence is what we have stated above—and the banks of Swan-river will ultimately swarm with medical practitioners unable to find the means of subsistence in England.

We regret that Dr. Thompson did not adopt a more concise, popular, and persuasive strain in his letter. He is evidently possessed of talents, learning, and acumen, which might have been turned to excellent account, in a less laboured and erudite epistle.

VI.

ELEMENTS OF PHYSICS, OR NATURAL PHILOSOPHY, &c. By *Neil Arnott*, M.D. Volume the second, 1830.

WE cannot too strongly recommend to our medical readers these two valuable and eloquent volumes, in which many of the most important branches of human knowledge are conveyed in language so elegant, and in terms so easy of comprehension, that he who runs may read, and whoever reads must understand. These volumes cannot fail to generate and diffuse an ardent desire for the study of natural philosphy—the most delightful, as well as the most comprehensive, circle in the sciences. We can only introduce two or three extracts, to exemplify the manner in which Dr. Arnot has contrived to invest physics with the charms of poetry or romance, and to melt down rugged and uncouth technicalities into language the most smooth, energetic, and harmonious.

I. INFLUENCE OF TEMPERATURE ON DECOMPOSITION.

"Again, as regards dead animal substances, we find that although at a certain, not very elevated, temperature, they undergo that change in the relations of their elements which we call putrefaction, when nearly their whole substance rises again to form part of the atmosphere, still at or below the temperature of freezing water, they remain unaltered for any length of time. In the middle of summer, recently caught salmon, or other fish, packed in boxes with ice, is conveyed fresh from the most remote parts of Britain to the capital. In our warmest weather, any meat or game may be long preserved in an ice-house. In Russia, Canada, and other northern countries, on the setting in of the hard frosts, when the inferior animals have difficulty in finding food, the inhabitants kill their winter supply, and store their provender of frozen flesh or fowl, as in other countries men store that which is salted or pickled. But the most striking instance of this kind we can adduce is the fact, that on the shore of Siberia, in 1801, in a vast block or island of ice, of which the surface was then more melted than in preceding summers, the carcase of an antediluvian elephant was found, perfectly preserved—an elephant differing materially from those now existing on earth, but its skeleton exactly corresponding with the specimens found deep buried in various countries. The creature was soon discovered by the hungry bears of the district, which were seen tearing off its hairy hide, and feeding on its flesh, as fresh almost as if it had lived yesterday, although it must have been of an æra long anterior to that of any existing monument on earth, of human art, or even of human being. Long after it fell from the ice to the sandy beach, and when its tusks had been carried away for sale by a Tungusian fisherman, and its flesh had been nearly devoured, a naturalist who visited it found an ear still perfect, and its long mane, and part of its upper lip, and an eye with the pupil yet distinguishable, which had opened on the glories of a former or younger world! About 30 lbs. weight of its hair, which had been trodden into the sand by the bears while eating the carcase, was collected, and is now preserved in different museums of natural curiosities—some, for instance, in the museum of the London College of Surgeons." 120.

The influence of HEAT on the animal and vegetable world, is treated by our eloquent and highly informed author with interest and animation. We shall make room for one short extract.

II. SOLAR HEAT ON ANIMATE AND INANIMATE NATURE.

"The influence which heat exerts on inanimate nature, is more immediately and completely perceived by the common mind, than its influence on beings which have life. Thus to all it is obvious, that the contrast between a winter and summer landscape, is owing chiefly to the effect of heat on the water of the landscape;—that during its absence in winter, there is the dry barren deformity of accumulated ice and snow, covering every thing, the roads impassable, the rivers bound up, perhaps hidden, the air deprived of moisture, and loaded often with powdery drift;—and that when warmth comes, the living streams again appear, gliding their way, the cascades pour, the rills murmur, the canals once more offer their bosoms to the boats of commerce, the lake and pool again show their level face, reflecting the glories of the heavens, and the genial shower falls upon the bosom of the softened earth, become ready to receive the spade or the ploughshare. Now this change is not at all greater than what happens to a winter tree acted upon by the warmth of spring.—To take another instance from inanimate nature, it may be said with truth, that heat applied to the cold boiler of a steam-engine, is the cause of all its succeeding motions; of the

heaving of its beam and pumps, the opening and shutting of its valves, the turning of its wheels, and its ultimate performance of work, as of spinning, or weaving, or grinding, or propelling vehicles by land and water: but as truly may it be said, that heat coming to a seed which has lain cold for ages, is the cause of its immediate germination and growth; or coming to a lately frozen tree is the cause of the rising of its sap, the new budding and unfolding of its leaves and blossoms, the ripening of its fruit. And what is true of one seed or tree, is true of the whole of the vegetable creation. When the warm gales of spring have once breathed on the earth, it soon becomes covered, in field and in forest, with its thick garb of green, and soon opening flowers or blossoms every where breathe back again a fragrance to heaven. Among these the heliotrope is seen always turning its beautiful disc to the sun, and many delicate flowers only open their leaves to catch the direct solar ray, but close them often even when a cloud intervenes, and certainly when the chills of night approach. On the sunny side of a hill, or in the sheltered crevice of a rock, or on a garden wall with warm exposure, there may be produced grapes, peaches, and other delicious fruits, which will not grow in situations of an opposite character—all acknowledging heat as the immediate cause, or indispensable condition, of vegetable life.

"But among animals, too, the effects of heat are equally remarkable. The *dread silence* of winter, for instance, is succeeded in spring by one general cry of joy. Aloft in the air the lark is every where carolling; and in the woods and shrubberies, a thousand little throats are similarly pouring forth their songs of gladness—during the day, the thrush and blackbird near our dwellings, are heard above the rest, and with the evening comes the sweet nightingale;—for all of which it is the season of love and of exquisite enjoyment. And it is equally so for animal nature generally: in favoured England, for instance, in April and May the whole face of the country resounds with lowings and bleatings and barkings of joy. And even man, the master of the whole, and whose mind embraces all times and places, is far from being insensible to this change of season. His far seeing reason of course draws delight from the anticipation of autumn, with its fruits; and his benevolence rejoices in the happiness observed among all inferior creatures; but independently of these considerations, on his own frame the returning warmth exerts a direct influence. In early life, when the natural sensibilities are yet fresh and unaltered by the habits of artificial society, spring to man is always a season of delight. The eyes brighten, the whole countenance is animated, and the heart feels as if new life were come, and has longings for fresh objects of endearment. Of those who have passed their early years in the country, or, among the charms of nature, as contrasted with the arts of cities, there are few who, in their morning walks in spring, have not experienced without very definite cause, a kind of tumultuous joy, of which the natural expression would have been, how good the God of nature is to us! Spring is a time when sleeping sensibility is roused to feel that there lies in nature more than the grosser sense perceives. The heart is then thrilled with sudden ecstacy, and wakes to aspirations of sweet acknowledgment." 124.

We regret that we have not space for the introduction of a few more specimens of Dr. Arnott's manner and matter. His style is peculiarly well fitted for the diffusion of scientific knowledge among popular readers; and we hope he will not allow his talents, which are of a high order, to lie inactive, now when his moral and physical powers are in their prime.

VII.

FEVER.

1. A Treatise on Fever. By *Southwood Smith*, M.D. Physician to the London Fever Hospital. Octavo, pp. 436. 1830.
2. Clinical Illustrations of Fever, comprising a Report of the Cases treated at the London Fever Hospital, 1828—9. By *Alexander Tweedie*, M.D. Physician to the Fever Hospital, &c. Octavo, pp. 204. 1830.

We class these two publications together, not to compare nor yet to contrast them, for they will not bear such—but because they treat of the same subject—emenate from the same source—and are written by colleagues of the same institution. Yet they are very different works. The first is a regular Systematic Treatise on Fever—the second little more than an extended Hospital Report; such as might and should be occasionally sent forth from an institution like the Fever Hospital—and is, we believe, the harbinger of some such publication as the first on our list. Considering the number of works on fever which we have grappled with and reviewed in this Journal during the last twelve years, it will not be wondered at that the sight of two new heads of the Hydra, almost at the same instant springing forth, should have occasioned something like the feeling of depression which a weary traveller experiences, on beholding from the summit of a mountain, which he thought was the last of the day's journey, a long and dreary ascent up an interminable chain of other and still higher ridges! We regret, and yet, it is a selfish regret, that our readers cannot completely sympathize with us on such occasions as these. We have been more than once mortified, on taking up the Medico-Chirurgical Review, many hundred miles from the metropolis, and observing the pages of *fever articles* uncut, while all the rest of the sheets were sullied by careful thumbing and perusing—articles, too, which have cost us many hours of intense intellectual labour, while our brethren were sleeping soundly in their beds, or labouring in bringing forth productions of a much more lively kind. But, in our voyage through life, we must take the rough with the smooth—the adverse with the propitious gale—the frowns with the smiles of fortune. It would be ingratitude, as well as affectation, to say that we have peculiar cause to complain of the buffetings and storms of fate. On the contrary, we believe that our *wishes* to please and benefit our readers have often received that cheering reception which more splendid *powers* are entitled to expect.

The cloud of mystery which has hung over the subject of fever for three thousand years—the clashing, discordant, and endless theories which have been broached respecting its nature—the diametrically opposite modes of practice which have been advocated by the most renowned physicians of the ages in which they lived—the difficulties, not to say the dangers, of applying doctrines which have been engendered in the closet to diseases occurring in the chambers of the sick—these and many other circumstances may account for the apathy with which books on fevers are received by the public,

and explain the reason why the reviews of such books have been passed over unread, while light and miscellaneous articles have been carefully perused. A knowledge of these things might well tempt a journalist, who studies the taste of the age rather than the duties of his avocation and the solid interests of medical science, to slur over such productions, however meritorious in themselves, in order to give ample space to subjects more excitant to the passions, or more gratifying to the propensities of human nature. But this practice we shall not follow.

The history of fever and of fever writers forbids all expectation of any important and sudden discovery, either in the theory or treatment of that disease, by the most gifted individual. The greater number of writers, indeed, and especially those master spirits who left doctrines as well as facts on record, have rather added to the mass of error than assisted in eliciting truth in relation to fever. Hence, the modern enquirer has the difficult task before him of clearing away a vast heap of rubbish before he can lay even the foundation of a solid edifice. The excellent opportunities of studying the phenomena of fever at the Fever Hospital, and the known zeal and talents of the two authors who have now come forward, induce a rational hope that their observations will at least tend to render the line of demarcation between truth and error more distinct than it has hitherto been. The fixing of such a boundary would be a great benefit conferred on the profession, and we really believe that the works on our table will contribute to that desired event. We shall now endeavour to convey to our readers a concise view of what they are to expect from a more extended perusal of the originals.

Dr. Smith's work is divided into nine chapters, all of which we shall not equally examine, as they are rather unequal in interest.

The first chapter, as usual, is employed in the work of demolition rather than of construction. The various doctrines relative to the nature and seat of fever, from Hippocrates down to Broussais, are examined—and, we need hardly say, disposed of.

"The prevailing doctrines relative to the nature and seat of fever at present, then, are two, the direct reverse of each other; one, that it is a general disease affecting the entire system; that this affection of the system consists of debility which is manifested first in a loss of energy of the brain, but which rapidly extends to every organ and every function, and that, consequently, *the absence of any primary local disease*, ought still to form, as it has so long formed, an essential part of the definition: the other, that it is in the strictest sense a local disease; that its primary seat is invariably fixed in some one organ; that the affection itself consists of inflammation; and that that inflammation is seated, according to one opinion in the brain; according to the other in the stomach." 27.

The first doctrine above alluded to is, we think, not quite fairly stated. Those who look upon fever as a general disease, and who believe that it, at the begining, manifests loss of energy in the brain, do not stop there, as Dr. Smith has made them stop. They know well, that when reaction is fairly established, some organ usually becomes topically affected, that topical affection being usually inflammation, or something very like inflammation. This makes an important difference. The error in the foregoing statement has led Dr. S. into another mistake, that of supposing that the class of theorists above-mentioned, condemn all depletion as detrimental to the disease.

"The advocates of the first deprecate all active interference: the grand evil to be contended with is debility: the physician can easily weaken, but he cannot easily strengthen: he can depress to any extent he desires, but he cannot communicate power as he wishes. In a malady therefore of which the very essence consists in loss of energy, the main duty of the physician is to husband the strength of the patient with the most anxious care, this being the chief means, as Cullen expressly termed it, of obviating the tendency to death. *The important inference is, that every kind and every degree of depletion that can add to the primary cause of the malady, must be abstained from with the utmost caution.*" 28.

We appeal to our readers whether the passage marked in Italics is not an overstrained representation of the practical views taken by the class in question. It is true that one or two writers—Dr. Stoker for example, have supported such a view of fever; but such is not the general principle acted on by practitioners in this country. Neither do the advocates for topical inflammation, as the cause of fever, unsheath their lancets and deplete away, as if they had pure phrenitis or enteritis to deal with. Even Dr. Clutterbuck lays down some restrictions on depletion in the shape of "modifications arising out of the *peculiar* nature of the organ affected, and, in some degree also the *nature of the exciting* cause." We agree, however, with Dr. Smith, that the doctrines of Clutterbuck and Broussais must naturally lead the disciples of those teachers to treat fever and inflammation in the same manner.

So far this second sect is much more dangerous, in the application of its doctrines, than the other.

Dr. S. deplores, and well he may, "the degree in which the science of mind is neglected in our age and country—especially in our profession"—hence the miserable state of the "art of reasoning" among its members. Dr. S. conceives that all the partial and imperfect views of fever which have, from time to time, been brought forward, originate in one or other of the following errors:

"Either that of assuming as a fact what is merely a conjecture; or that of assigning to the genus what belongs only to the species; or that of characterising the disease by what appertains only to a stage; or that of mistaking the effect for the cause. On careful examination it will appear that one or other of these errors, which are as serious as they are palpable, has vitiated in a greater or less degree every generalization of fever that has hitherto been attempted.

"Thus the believers in debility derive their notion of the whole disease from the phenomena which occur in the first and the last stages only: in these, it is true, they may find abundant evidence of debility: but then they overlook the intermediate stage in which there are generally the most unequivocal indications of increased sensibility in the nervous and increased action in the vascular systems: in this manner they characterise the disease by what appertains only to certain stages of it. Again, when they contend that debility is not only the essence of fever in general, but is really characteristic of every type of it, they affirm what is indisputable of fevers in particular seasons, in particular climates, or in particular constitutions; but beyond this their generalization cannot be extended: in this manner they assign to the genus what belongs only to the species. And when Cullen goes on to affirm that the proximate cause of all the morbid phenomena is a 'spasm of the extreme vessels,' he commits the additional and more palpable, but not less common error, of assigning as an undoubted fact, as a real and ascertained occurrence, what is only a

conjecture, and for which there is not, and for which he does not even attempt to adduce the shadow of evidence.

"Precisely similar to this is the error of those who for the most part belong to the same school, and who attribute the essence of fever to a morbid condition of the blood. The blood may be diseased in fever, but if it be so, these writers do not *know* it, or at least they do not adduce any evidence that they are in possession of such knowledge: they do not appear so much as to have questioned chemistry; at all events, it is certain that they have hitherto received no satisfactory answer. There is no evidence on record that the alleged deterioration of the blood takes place in every type and every degree of fever: and if there were it would still be but one event among many, and one that occurs late in the series, and therefore could possibly be nothing more than an effect.

"In like manner those who maintain that inflammation of the brain is the sole cause of fever, assume as an established and admitted fact the universal and invariable existence of inflammation of the brain in this disease. Inflammation of the brain, without doubt, is demonstrable of many individual cases, and of some whole types: but beyond this there is no proof that the generalization can be carried: the evidence indeed in regard to many cases is entirely against the assumption, and is as complete as negative evidence can well be: consequently it must be admitted that even this hypothesis, in the present state of our knowledge, is founded on the error of assigning to the whole genus what belongs only to particular species: and it would be trifling with the reader to attempt to prove, that this is still more certainly and strikingly true with regard to inflammation of the mucous membrane of the stomach and intestines—an affection which in innumerable cases in which its existence is certain, clearly appears on the slightest examination of the succession of events, to be an effect and not a cause." 33.

These extracts will lead our readers to expect some sober and rational views of fever from Dr. Smith, and we think they will not be disappointed.

The first thing to be done in the investigation of fever, is to ascertain the concourse of symptoms—and the second, to determine the order in which they occur. This done, our author thinks the essential will be easily distinguished from the adventitious—the causes from the effects. It is not quite easy, however, to say what are the essential symptoms in a disease presenting such a variety. "Our guide is *invariableness* of occurrence."

"If we can ascertain that a certain number of events *invariably* take place in every form and every degree of fever, these events will give us the particular phenomena which are common to all the varieties of the disease. If we can further ascertain that these events *invariably* concur in a certain order, we shall have discovered what events bear to each other the relation of cause and effect. And the establishment of this relation of events, this constant connexion with each other, this uniform antecedence and sequence appears to me to be the only theory after which it is consistent with the principles of sound philosophy to search." 37.

Dr. Smith has endeavoured to establish this "constant connexion," carefully restricting himself to the deduction of legitimate conclusions from facts previously ascertained.

Whatever be the agents or exciting causes of fever, he observes they can only induce the disease by effecting certain changes in certain organs. What then are the organs implicated? What the conditions thus induced in them? Which are the organs that sustain the first assault, which are those attacked in succession? The pathology to be laid before the reader will, he thinks, demonstrate the first two points—the establishment of the

last two will be attempted by an examination of the histories of the cases. "It is only by observing the symptoms during life, and comparing them with the morbid appearances after death, that we can discover the signs which indicate the existence of these states." No doubt this is our only way:—but then, unless we had the opportunity of seeing the post-mortem changes at every period, from the first symptom till the last breath, how can we be certain of their nature? We have not these opportunities, for evident reasons, because people do not die of fever till the disease has acquired a certain degree of intensity. Then we see only the changes corresponding with the late, not with the early symptoms.

In the second chapter our author pursues the subject still more rigidly. Fever, he observes, is a genus consisting of several species, each species presenting many varieties. The external characters of these varieties and the internal states on which they depend, are so opposite, that no two diseases in any two parts of the nosological catalogue, present a more diversified appearance, or require a more varied treatment, than may be the case in two different types of fever. The fever of one country or one season is not the same as the fever of another country, or another season of the same country. Yet amidst this astonishing diversity, there is a something which preserves the identity, under every aspect which it has hitherto been observed to assume. Thus the term fever has never been denied to the disease as it occurs in this country—in the West Indies—at Batavia—and in Grand Cairo. Yet if four people labouring under these respective forms could be brought together in the ward of an hospital, what a difference would be seen in their exterior characters! What is this something which is common to all the forms of the disease? Boerhaave collected all the symptoms recorded by authors or observed by himself in fevers, and then threw out, one by one, those which did not appear in all cases of the disease. He was surprised to find himself, in the end, reduced to the small catalogue of three—shivering, frequent pulse, heat. And yet there is not one of these three that is invariably found in every type of fever—while, in innumerable instances, the combination of the three is absent. Cullen's definition is still less tenable, and our author thinks that the last item in it, "without any primary local affection," has a direct tendency to mislead the mind, and prevent it from observing the real phenomena of the disease. The fact is, as we have often maintained in this Journal, that fever is not an entity, but a series of events, which must forever defy the narrow boundary of a definition, within which nosologists endeavour to confine it. The first object of enquiry is, what are the events which invariably occur in fever?

"Where shall we look for the events? Not in the symptoms. Symptoms are not events; they are only indications of events: symptoms depend upon states of organs; they are the external and visible signs of internal, and for the most part, as long as life continues, invisible conditions. It is then to the state of the organs that we must look for the events of which we are in search.

"Are there any states of any organs that always exist in fever? Are the states constant? Are the organs affected constant; and can both be ascertained? If this can be truly answered in the affirmative; if it can be proved that there are certain conditions of certain organs which invariably exist in fever, in every type, in every degree, in every stage of it, we shall have arrived at a satisfactory conclusion relative to the first part of our inquiry.

"The evidence is as complete as observation during life and inspection after death can

make it, that a morbid change does take place in a certain number of organs in every case of fever, from the most trivial intermittent to the most alarming continued fever, from the mildest plague to the most malignant typhus; that at the two extremes of this scale, and at all the intermediate gradations of it, there are certain organs which are always affected, and that the affection in all is similar.

"The identity of the organs is inferred from the indications they give of disordered functions during life; the identity of the affection is inferred from the similarity of morbid appearances which they exhibit on examination after death.

"The organs affected are those which constitute the nervous system; those which constitute the circulating system, and those which constitute the systems of secretion and excretion. The spinal cord and the brain; the heart and the arteries, especially their capillary extremities; the secreting and the excreting organs, which in fact are composed, essentially, of the capillary extremities of the arteries, the secreting and the excreting extremities of these arteries, especially as they terminate in the external skin, and in the mucous membranes, which form the external shin, this is the chain of diseased organs: derangement in the nervous and sensorial functions: derangement in the circulating function: derangement in the secretory and excretory functions, this is the circle of morbid actions.

"There never was a case of fever in which all these organs and affections were not more or less in a morbid state: there never was a concurrence of this morbid state, in this complete circle of organs without fever. *The events which* invariably *concur in fever, then, are a certain deviation from the healthy state in the nervous and the sensorial functions; a certain deviation from the healthy state in the circulating function; a certain deviation from the healthy state in the functions of secretion and excretion.* A deviation from the healthy state in one circle of actions will not present the phenomena of a fever; a deviation from the healthy state in two circles of action will not present the phenomena of a fever; there must be a deviation in the three circles before fever can exist. Such then are the common phenomena of fever.

"For obvious reasons the detail of the proof that these several events really and invariably take place, must be postponed until the phenomena themselves have been stated, or what is termed the history of the disease has been given.

"But it is not the invariable concurrence of a particular number of events that is alone sufficient to constitute fever; to this must be added invariableness of concurrence in a particular order. As will be shown in the proper place, there is complete and irresistible evidence that these events do occur in one invariable order. Derangement in the functions of secretion and excretion never comes first in the series; derangement in the nervous and sensorious functions never comes last in the series; derangement in the function of the circulation never comes either the first or the last in the series, but is always the second in succession.

"The order of events then is first, derangement in the nervous and sensorious functions; this is the invariable antecedent: secondly, derangement in the circulating function; this is the invariable sequent, and thirdly, derangement in the secreting and excreting functions; this is the last result in the succession of morbid changes." 50.

We appeal to our readers—we appeal to Dr. Smith himself, whether the above theory be not a mere version, rather more diluted with words, of the theory propounded in the following passage of a work published many years ago by the Editor of this Journal.

"*Ratio Symptomatum*—We now proceed to trace the *action* of these febrific causes on the human frame—or in other words, the *ratio symptomatum* of fever itself; for in nature and

in truth, there is no such thing as a *proximate cause* of this disease, the whole train of symptoms being a series of causes and effects, extremely difficult to delineate or comprehend. If any thing could deserve the name of *proximate cause*, it would be some peculiar state or phenomena *invariably present* at the beginning of fever, and without which, the disease could not be said to exist. But all writers agree that there is no *one* symptom, state, or phenomenon which is constantly observable in fever. Neither quickness of pulse—increased heat—thirst—nor headach can be laid down as pathognomonic; for although *some* of these are *always* present, no *one* of them is invariably so.

"If an appeal, however, be made to accurate clinical observation, it will probably be found that from the first till the last moment of fever, *two phenomena* are constantly present—a derangement in the balance of the *circulation*, and of the *excitability*. If the calibre of the radial artery, or the strength and velocity of its pulsations shew nothing preternatural, (which by the bye will be a rare occurrence,) yet, the experienced physician can instantly detect the unequal distribution of the vital fluid, as well by the torpid state of the *extreme* vessels on the surface, and throughout the glandular system, as by the turgidity of the *primary* trunks. The imperfect perspiration and secretions will point out the one; the peculiar febrile anxiety—hurried respiration on attempting to sit up or move—fulness of the præcordia, and heaviness about the head, will clearly demonstrate the other. In no one instance, during a long acquaintance with fever, have I failed to notice these indications of a deranged balance of the *circulation*.

"The proofs of broken balance in the *excitability* are equally manifest. It is now well known how much the functions of the glandular system are dependent on the nervous. In fever, the secretions are never perfectly natural. They are in general scanty—sometimes preternaturally copious; but always depraved. While this torpor or irregularity is going on in the glandular system, the nerves of sense shew plain marks of inequilibrium of excitability. The same degrees of light and sound that in health would be pleasing, will, in fever, be either distracting, or incapable of making any impression at all. The stomach will be in a state of morbid irritability, and the intestinal canal completely torpid. Speaking generally, however, the glandular or secreting system is irregularly torpid—the nervous or sentient system, irregularly irritable and debilitated.

"Now if we find that the general operation of the various *predisposing* causes of fever, is to disturb more or less, according to the force and condition of the subject, the balance of the circulation and excitability, we advance one step nearer to a knowledge of this *proximate cause* in fever, because we find in it the same *ratio symptomatum* as in all the phlegmasiæ, modified only by the *exciting* cause."*

In the year 1819, Dr. Wight published a paper on the nature of fever, in this Journal, in which he comes to the same conclusions as Dr. Smith. The following short extract will suffice to shew the similarity, if not identity of opinions.

"When Cullen says, 'that there is lesion of several functions,' he approaches the truth, but still the idea conveyed is imperfect; for if any part of the body is exempt, it is plain that there is present, not a general affection or disease of the whole body, but that of a part, or a local one; and this cannot be called fever, which spares none of the functions. If, then, we see that all the functions, vital, animal, and natural, are disordered in all cases, however much they may differ from one another, in manner, duration, appearance, and

* Johnson on Tropical Climates, 2d Edit. p. 24.

danger; if, in fine, such disturbance of the functions is present in every fever, have we not obtained a certain universal character by which fever is to be distinguished from every other disease?"* 312.

If these passages diminish the intensity of originality in Dr. Smith's doctrine, they will not probably detract from its stability or truth. Dr. Smith has also the merit of giving a greater development and illustration to the doctrine than any preceding writer. The following passage will shew that our author is not a disciple of either Clutterbuck or Broussais.

"No other disease exhibits the same train of phenomena in the same order of succession. In inflammation some of the phenomena are the same: but the order in which they concur is not the same; and this affords a clear and universally applicable mark of distinction between fever and inflammation. In inflammation there is a similar derangement in the secreting and excreting functions: there is also sometimes similar derangement in the circulating function: but the derangement in the nervous and sensorial functions is seldom if ever similar: the derangement that does take place in these latter functions, while it is apparently different in kind, is certainly and invariably different in the order of its occurrence." 51.

Dr. Smith observes that we can now answer the question so often asked—"are fever and inflammation the same?"

"Fever and inflammation are not the same, because the term fever is appropriated to the designation of a certain number of events which occur in a certain series: the term inflammation, on the other hand, expresses another series of events, each event composing this train, succeeding each other in a different order: and the difference between the two series of events is precisely this difference in their individual phenomena and in their order of succession." 52.

The precise nature of the physical and physiological conditions of organs, both in fever and inflammation, are unknown. "We compare the events, and we see that they differ; and, since the use of names is to mark and express differences, it is right to distinguish these events by different terms." Out of the system of organs that are always affected in fever, some may be more and some less diseased—and from this diversity alone, the utmost variety may arise in the external characters of the malady.

"Thus, at one time, the spinal cord and the brain may be intensely affected: consequently the patient may be seized with violent pains in the limbs; with ferocious headach; with early delirium, which may rapidly increase to such a degree of violence as to require restraint: or, on the contrary, all the muscles of voluntary motion may be seized instantaneously with such a loss of energy that they may truly be said to be paralyzed: at the same time the sensorial faculties may be overwhelmed almost as completely as they are in apoplexy: thus may be formed one type of fever: and such a concourse of symptoms is actually found to exist: it ushers in the plague when it first stalks into a devoted city to sweep away its thousands and its tens of thousands.

"At another time the disease may seize with peculiar violence upon the organs of secretion, and especially upon those which belong to the digestive apparatus: hence the liver may suddenly pour forth an immense flow of bile, so vitiated in quality as to irritate and inflame whatever it touches, and so abundant in quantity as rapidly to diffuse itself over

* Med. Chir. Journal and Review, Vol. I. p. 312. January, 1819.

every part of the body, and to tinge almost every tissue and every fluid: at the same time the stomach and intestines may be involved in such acute disease that the powers of life may be exhausted in a few hours by incessant vomiting and unconquerable purging; thus may be formed another type of fever, and such a concourse of symptoms actually occurs in the yellow fever of the West Indies.

"Now we may witness a severe though a less violent affection of the spinal cord and the brain than occurs in plague. There may be present great pain in the back and limbs; intense headach; early and violent delirium; a burning skin; a quick and strong pulse; urgent thirst, and constipated bowels; or, on the contrary, there may not be pain of the head, but giddiness; not delirium, but stupor; not a burning hot, but a moderately warm or a cool skin; not a frequent and strong, but a frequent and feeble pulse. In either case we have a fair specimen of the common fever of our own country, the first forming the variety which may be termed acute, the second subacute cerebral.

"Now again we may witness a concurrence of symptoms very similar to the latter in the commencement of the attack, only that there is from the beginning greater prostration of strength; and a rapid increase in the derangement of the nervous and sensorial functions; together with a brown and dry tongue; a tender abdomen, and dark and offensive stools; thus may be formed another type of fever to which is commonly assigned the name of typhus." 55.

In each of these cases the most urgent symptoms are located in one set of organs, but the other organs of the febrile circle are as really, though not so intensely disordered. Severe affections of the brain will mask those of the stomach or vascular sytem, and vice versâ. How great then must necessarily be the diversity of symptoms presented by the different forms of fever—how incalculable the varieties resulting from difference of intensity alone!

"One degree of affection of the brain, for example, will occasion violent headach, constant watchfulness, great restlessness, a peculiar expression of the eye, and intolerance of light; in another there will be no headach, or none of which the patient will complain; there will be sleep though it be disturbed and unrefreshing; there will be no peculiar expression of the eye, and no intolerance of light. By one degree of affection the sensibility will be rendered preternaturally intense; by another it will be totally obliterated; one will produce violent delirium, another, only slight wandering, or unrefreshing slumber; one, violence, requiring restraint; another, profound coma. In the circulating system the symptoms will alike vary. One degree will produce a quick, strong and hard pulse; another, a quick, small and feeble pulse; another, a slow and intermittent pulse. A similar diversity will be found in the temperature of the body; in one, the heat will be little changed; in another, it will be below the natural standard; in a third, it will be intense, and the organs of secretion and excretion will equally vary in the extent of their morbid changes." 58.

When to this variety are added the diversities occasioned by various stages of the diseased processes—by the previous state of the organs—by the reaction of one diseased organ on another, producing innumerable and ever-varying combinations, can we wonder if the symptoms of fever appear to be countless! And as no two cases of fever can ever be precisely alike, it must be in vain, Dr. Smith thinks, to seek for the common phenomena of the disease in the external symptoms—hence, he observes, the proper object of pursuit in all these inquiries is the "real nature of the affection"—the symptoms being of consequence only as they are indications of the existence of that affection.

"It is then in the organs alone that we can find a perfect uniformity: but their condition is as fixed and invariable as the return of day and night. All the operations of nature are uniform. When, in any case, we have succeeded in discovering what the operation is, we see that it never varies. The same causes, under the same circumstances, always produce the same effects. The causes of fever, whatever they be, under the same circumstances, always produce the same conditions of the organs. In proportion as we ascertain with clearness and precision what these conditions are, we observe that they recur in all cases with the most undeviating regularity, and when our knowledge of them shall have become complete, it is probable that we shall find that they are as constant in their return as that of the sun after its setting, and that they no more change in their nature or progress than the sun deviates from its path." 60.

Much do we fear that the talented author is a little too premature in the assertion that "the condition of the most important organs in the various types of fever, as they occur in our own country, we do now know with precision." At all events, we apprehend that a great many years must elapse ere we shall be able to know, with precision, the condition of each organ *before death*:—that is, ere we can tell by the symptoms what are the changes going forward in the living body.

In the third chapter, Dr. Smith exhibits a very able analysis of the symptoms of fever, more especially the synochus, or common fever of this country. We regret that we shall be able only to give a faint outline of the principle features of this interesting chapter. It is the more valuable, as many of the phenomena are drawn from the personal feelings of the author himself, while labouring under the disease. With a mind so trained to accurate observation and logical deduction, Dr. Smith's delineations are peculiarly valuable.

The first symptom which characterizes the mild form of fever in this country (synochus mitior) is a loss of mental energy. This would always be noticed, if patients were capable of analyzing their sensations, or determining the order of their succession. Closely connected with this mental weakness, is the loss of energy in the muscles of voluntary motion; resulting in lassitude. Next in succession is that peculiar febrile malaise, which no words can describe, but which never can be forgotten by him who has once experienced it. It is much more distressing than pain. It is this which, in all febrile diseases, makes the patient wish for morning in the night, and long for night during the tedious hours of the day. To these symptoms positive pain soon succeeds—first in the back or loins, and then in the limbs. The countenance changes, and expresses dejection, the features being shrunk, and the tint pallid. The skin takes on increased sensibility to external agents, and diminished ability to resist their influence. Chilliness is felt even in a heated room. It arises from internal causes, and is not to be counteracted by external heat. It is not an actual deficiency of caloric in the body, for the thermometer applied to the skin or any other part, indicates the same heat as in health. The symptoms alluded to, are clearly referrible to derangement of function in the nervous system.

"There is as yet no affection of any other organ obviously or, at least, much developed. The circulating system, it is true, is just beginning to be affected. The pulse is no longer perfectly natural. It is more languid than in the state of health; sometimes it is also quicker: at other times it is slower; now and then it is scarcely changed in frequency, *but its* action is invariably weaker than in its sound state." 82.

We believe that accurate observation will show the *cotemporaneous* derangement in the nervous, vascular, and secretory system, in almost every instance. We do not deny that the febrile cause is first applied to the brain and nervous system, and that the first morbid movements are there; but we maintain that when derangement of sensation becomes appreciable, derangement of circulation and secretion will likewise be so. How indeed can it be otherwise with functions so intimately connected—nay dependent on each other?—but to return.

The respiration becomes affected—the breathing is shorter and quicker, especially if muscular movements be excited.

"The transition from the affection of the nervous and sensorial to that of the circulating and respiratory systems is thus clear and striking. Physiology teaches us how closely these systems are connected, and how mutually they are dependent one upon the other, the closest observers and the ablest experimentalists candidly confessing that they are scarcely able to determine which is the least dependent, or the action of which the least necessary to the other's performance of its functions." 82.

Dr. Smith thinks that it may sometimes be many days before any other functions, except the sensorial, circulating, and respiratory, suffer in fever. This does not accord with our observation. All, or almost all the secretions are quickly if not simultaneously affected. The skin, according to Dr. Smith's own statement (page 81) is deranged in function in the primary movements of fever—and surely sensation is not the only, or even the principal function of the skin. Perspiration is equally important. Look at the kidneys, the intestinal glands, the salivary glands—they are all diminished in energy, with diminished power in the brain.

And now we see an opposite train of symptoms arise—namely reaction. The pulse becomes fuller, stronger, quicker, than in health—the skin hotter.

"*Immediately the circulation is thus excited, the functions of secretion and excretion become deranged.* The mouth is now dry and parched; the tongue begins to be covered with fur; thirst comes on; the secretion of the liver, probably also of the pancreas, and certainly of the mucous membrane lining the whole alimentary canal, is vitiated, as is proved by the unnatural quantity, colour, and fetor of the evacuations; the urine likewise is altered in appearance, and the skin is not more remarkable for the sense of heat, than for that of dryness and harshness which it communicates to the touch. With the excitement of the pulse and the increase of the heat, the pain in the back and limbs and the general febrile uneasiness are much augmented.

"At this period, then, the fever is fully formed; the series of morbid phenomena is complete: any thing more that happens is referrible to degree and duration, and must be the result of one or other of these circumstances, or of their combined operation." 85.

We certainly cannot coincide with Dr. Smith in the foregoing passage. No eloquence can persuade us, contrary to the evidence of our own senses, that secretion and excretion become deranged only when reaction commences in fever. According to our own observation those functions are deranged, though in a different manner, during the antecedent stage described by Dr. S. and all other writers on fever. It is true, the secretions and excretions are diminished—but they are also changed. Speaking of the incipient stage of fever previous to reaction, Dr. Parr, no mean authority, makes use of these words:—"The secretions are, in general, checked; the urine is watery; the mouth dry and clammy; ulcers no longer discharge, &c."

Neither do we think, with Dr. S. that when re-action takes place, "the series of morbid phenomena is complete." Excepting a few, and a very few cases of dreadful, quick, and fatal fevers, in the hotter regions of the earth, we have generally observed another stage, more or less defined, in which there was a kind of remission, marked by a state of sensorial energy, vascular action, and secretion different from the stages of chilliness and first accession of excitement. In intermittents, this is the most important stage of the three—and even in continued fevers, *at the commencement*, there is a morning remission and evening exacerbation, corresponding in kind, though very different in degree, with the train of phenomena described by Cullen and other systematic writers.

We need not dwell on the phenomena connected with the stage of excitement in fever, as increased pain in the head, increased sensibility of all external stimuli, augmentation of disturbance in the sensorial functions, depravation of the senses, watchfulness, &c. Our author avers, that in the fevers of this metropolis, the stage of excitement goes on uninterruptedly, or hardly ever with remissions, till the end, which is usually in fourteen days, when convalescence commences.

"One of the most remarkable circumstances connected with the ordinary fever of this country, in the present day, is the uninterrupted and perfect continuity of its phenomena. As long as the febrile state remains, nothing deserving the name of a remission is in general to be perceived. Occasionally, it is true, a slight increase in the symptoms may be observed towards evening, especially in the heat of the skin; but even this is not common, and it is scarcely ever great enough to deserve the distinction of being called an exacerbation. Much less is there any regularity in the accession and decline of such excitement. *In the great majority of cases not the slightest approach to an exacerbation and a remission can be distinguished from the commencement to the termination of the disease.* Yet the older writers speak of these events as if they were as palpable as the paroxysms of intermittent and as constant as the return of morning and evening. There cannot therefore be a doubt that the character of the ordinary fever of this metropolis is greatly changed from the character of that which prevailed two centuries ago; and the circumstances which have contributed to produce this change will be considered hereafter." 90.

We cannot pretend to put our experience in fever, as far as this metropolis is concerned, with the physician of the fever-hospital; but as far as our observations extend, which are generally made upon a class of patients different from the inmates of a public institution, we have not observed those purely *continent* fevers alluded to by former writers, and now, by Dr. Smith's account, the prevailing ones of this capital. Even in the CAUSUS, the dreadful scourge of the West Indies, there is a remission between the storm of excitement, and the last melancholy stage of black vomit. As soon as the mornings get a little finer, and the evenings longer, we will invite Dr. Smith to a strict examination of a few patients at the Fever-Hospital; and if he find them presenting the same phenomena at these two periods, we shall cheerfully admit that the worthy author has added a wrinkle to the horn of our knowledge.

Dr. Smith acknowledges that we are ignorant of the precise condition of the brain and other organs collectively affected in these mild forms of fever, because we have no opportunity of inspecting them, in consequence of the favourable termination, which is almost always the case.

"However, this may be, and to leave for the present all matter of inference, and to keep strictly to the matter of fact, we do positively know that the mild forms of fever become severe in consequence of the supervention of inflammation in certain organs. Perfectly unknown as the nature of the primitive febrile affection at present is, yet that in the progress of the disease it does ultimately pass into inflammation is a fact, the evidence of which it is impossible to resist; although the same observation which teaches us this most important truth *teaches us also that the inflammatory action is always considerably modified by the febrile state.* 94.

This is very rational pathology—and is almost exactly the same as has been advocated by all impartial observers of late years. Experience has taught us that fever is something different from inflammation—and that the great danger in fever is the supervention of inflammation—that death is almost always occasioned by the inflammation of some organ essential to life.

Dr. Smith proceeds then to synochus gravior, which occurs under two degrees of intensity—the sub-acute and acute—and these two degrees he traces as they present symptoms of cerebral, thoracic, or abdominal affection. We are loth to pass the different sections unnoticed; and yet we must be very brief in our analytical sketches.

1. *Syn. Grav. with Subacute Cerebral Affection.* The accession, in these cases is the same as in the mild form already described, up to a certain period. But, at the time the headach diminishes in the former, it increases in the latter. Still it is often not severe. Practitioners are led into great error by apprehending no mischief in the head because headach is trifling, or altogether wanting. In the latter case giddiness is the substitute. In most cases, as long as the pain continues, the heat of surface remains much above par—especially about the head, and in particular parts of the head, corresponding with the seat of pain. The dull and heavy expression of the eye is greater than in synochus mitior—the conjunctiva becomes whiter and more glistening than natural, but sometimes more injected—the sensibility is preternatural when light is admitted, and this is not confined to the eye alone, but to the whole nervous system, especially the nerves of hearing. "Exposure to a glare of light and a loud noise would, alone, rapidly change a slight into the severest form of cerebral affection." The expression of the eye is indicative of suffering without the power to bear it. The face is sometimes flushed, often pallid. The want of sleep is distressing and the restlessness constant. Delirium now appears, though not invariably, and is seldom violent or long-continued. The pulse, the tongue, the evacuations, meantime, may not differ materially from those of the mild form of the fever.

Such is the train of symptoms for eight, ten, or even fifteen days, about which a remarkable change takes place, and an entirely new train of phenomena supervenes, presenting a striking contrast, according as the patient is destined for life or death. *If for life*, a balmy sleep takes place, from which the patient awakes a new being, and this change is easily recognized by the experienced eye, even of the nurse. The febrile symptoms are all mitigated—the amelioration increases—and convalescence is soon established. *If for death*, the headach often disappears, or at all events diminishes—the giddiness is no longer perceptible—the sensibility is obtunded—the mind

becomes more dull and heavy—the patient may still be roused, but falls back into a state of stupor—delirium or incoherent muttering takes place—the pulse increases in frequency and is weaker—signs of disease in the chest and abdomen now present themselves, as purely cerebral fever from beginning to end is rarely to be seen. The tongue becomes more loaded and is often dry, though the thirst diminishes. From such a state recovery is rare, though it sometimes does occur. In general, things go on from bad to worse, and the patient dies exhausted. To the foregoing more common symptoms, there are sometimes others more uncommon added—as muscular tremor, sudden screaming, rolling of the head upon the pillow, jactitatio, floccitatio, involuntary discharges, &c.

In the acute cerebral affection of synochus gravior, the history is precisely the same, excepting that the symptoms are more severe, and their progress more rapid. One remarkable modification of the pulse in this dangerous grade of fever, is the slow and intermitting pulse. This, in conjunction with intense pain in the head or back, in the outset of fever, is a very ominous phenomenon, and indicates great severity of disease in the sequel. If active measures are not taken, the disease will be beyond control in a day or two, and the patient will die before the fever, in mild cases, would have time to form.

Cases in illustration of the acute and subacute affections in the two grades of fever are next detailed by the author, which we must pass over. Three sections follow on synochus gravior, with thoracic, abdominal, and mixed affections. In respect to the first, Dr. S. avers that there is probably "no case of fever, however slight, in which the mucous membrane of the bronchi remains in a perfectly sound state." This state of disease will be accurately described under the head of pathology. Whenever the thoracic symptoms are sufficiently intense to become prominent, and especially when they occur early in disease, they always greatly aggravate the general febrile symptoms. In this case two things happen—the proper febrile symptoms are modified—and new symptoms are added to the train. These new and peculiar symptoms are as follow.

"Pain in the chest, sometimes severe, sometimes only slight; sense of stricture or dyspnœa; inability to expand the chest by a full inspiration without pain or uneasiness; cough frequently aggravating the pain; sometimes dry, sometimes accompanied with frothy mucous expectoration. Respiration sometimes slow and heavy, at other times, on the contrary, short and quick; never natural: perhaps the physician may detect thoracic disease in the more obscure, and measure its extent in the more obvious cases, by observing the manner in which the patient breathes, better than by any other single means. The altered respiration is very frequently accompanied with that peculiar noise in breathing which is termed 'mucous rattle.'

"The pulse, in the commencement of this open and decided chest affection, may not be above 80 or 90; it is hardly ever sharp; it is generally weak; now and then it is full and of good strength; but whatever other character it may possess, it is almost always soft. In a few days, as the disease advances, it uniformly rises in frequency and becomes weaker. Towards the end of the disease it is almost always hurried and feeble, although cases occasionally occur in which it is observed at this period to become suddenly slow and intermittent. The tongue is usually foul; commonly moist; but, in severe affections and *in their* advanced stage, it sometimes becomes dry. The skin is often moderately warm,

but it is never intensely hot; it is much more common for it to be cool, and to be of a more dusky colour than natural.

"Such are the usual conditions of the respiratory and circulating systems and of the tongue, the great index of the state of the mucous membrane of the alimentary canal, when the thoracic affection increases so as to become prominent and acute. The manner in which it influences the cerebral affection is commonly by hastening the period at which the pain of the head lapses into confusion and stupor. Early insensibility, assuming the form of a muddled or exceedingly confused state of mind, is a very constant symptom of more than ordinary thoracic affection. Accordingly, the delirium which succeeds, or which accompanies this state is always low muttering talkativeness, or incoherent wandering, rather than violent delirium, which last is seldom, if ever, found in combination with severe thoracic disease. The pathological condition of the lung, perfectly accounts for this modification of the condition of the brain, as will be shown hereafter." 123.

The cases detailed in reference to this section, we pass over.

Synochus Grav. with abdominal Affection. In synochus mitior, our author thinks the mucous membrane of the stomach and bowels is but slightly affected; but that it is really diseased, even in the mildest cases, we have sufficient evidence, in the invariable derangement which takes place in the functions of the organ throughout its whole course, from the mouth to the anus and in the constant vitiation of the secretions and excretions."

"In the severer forms of fever on the other hand, in the great majority of cases, the affection of the abdomen becomes prominent, and whenever it does so it aggravates all the other febrile symptoms, and adds greatly to the danger of the disease." 128.

Abdominal affection, Dr. S. observes, may be severe from the commencement, and give early indications of its existence—or come on at a subsequent stage of the disease when the symptoms will be materially different. In the *former* case, in addition to the ordinary phenomena, there will be nausea, retching, or even vomiting—symptoms which, in decidedly cerebral cases, Dr. S. avers, are seldom present. When they are so, they indicate a severe abdominal affection, and it will be well if the practitioner is aware of this circumstance.

"At this early period the bowels are commonly constipated, and on inquiry *it will be found that they have been so for some days previously to the attack of fever;* but in a day or two after the commencement of this attack they fall into the opposite state and are looser than natural. The concurrence of nausea, retching, vomiting, and purging in the commencement of fever is a certain proof that severe abdominal affection is present, and if not actively treated and effectually checked at this early stage, it will soon render the case formidable, if not hopeless." 129.

The passage which we have marked in Italics, will bear us out in our observation that the secretory system is affected coeval with the other systems involved in fever. According to Dr. S. the abdominal secretions are locked up even before the attack of fever. This affection, when thus open and primary, is often attended with another symptom, namely, pain of the abdomen, attended in exquisitely marked cases, by purging. But pain is not to be expected in all cases where there is serious disease going on in the abdomen. It is often absent in such cases:—but pressure of the epigas-

trium generally renders it unequivocal. Even when pain ushers in the abdominal affection, it usually diminishes after a certain time, and ceases altogether after the tenth day. Dr. Smith, and all accurate observers, have remarked how little patients will complain of pain in the abdomen, at a time when the slightest pressure on the epigastric region cannot be borne. This is a striking feature in the advanced stages of the disease. The following passage is certainly deserving of attention.

"There is thus a remarkable coincidence between the progress of the symptoms in the abdomen and in the head. We have seen that however intense the cerebral affection, the pain of the head which accompanies it diminishes after a certain time, and in a day or two after it has begun to diminish, ceases altogether. In like manner the pain which ushers in an acute abdominal affection diminishes after a certain time, and soon wholly disappears. After this period, therefore, we should have no more indications of abdominal than we have of cerebral pain were the intestines, like the brain, enclosed in a bony case. When an organ can be touched, it gives us an additional and an invaluable means of ascertaining its morbid condition; and this is one reason why that condition is commonly so much more certainly known in surgical than in medical diseases. What the result would be, could we press the brain as we can the abdomen, after its sensibility is so much diminished, as to cease to occasion pain, we do not know; but it would be a bad use indeed to make the additional means afforded us of ascertaining the condition of the intestines, were we to allow the additional information we thus gain, to obscure our perception of the perfect analogy there is in the progress of both affections. We know that, as the disease advances in both, the pain ceases; but, in the one case, we have the means of ascertaining that there still remains preternatural tenderness on pressure, as in ordinary inflammation, which we are without the means of discovering in the other: still the important practical fact afforded by the history of both is the same, that disease having reached a certain point, the pain diminishes; and having advanced still further entirely disappears." 132.

As the pain lessens or ceases, the purging advances. This phenomenon succeeding to constipation and pain, "affords an infallible indication of abdominal disease." The tongue affords another valuable diagnostic guide. It is preternatually red—sometimes of a bright and vivid colour throughout—at others only at the sides or tip. The body is often loaded with fur, of a dirty white, yellow, or grayish colour. The papillæ appear enlarged, red, and elevated. As the intestinal disease advances, the vivid colour diminishes, and the tongue becomes dry, while the teeth become incrusted. The pulse is apparently free from any marked character in this complication of fever, and ranges usually from 80 to 100, beyond which it seldom goes, being generally soft. Sometimes, at an advanced period of the disease the pain and purging both cease, and the motions appear healthy. If this be accompanied by a general amelioration of the other symptoms, it is a sign of recovery—if the other morbid phenomena continue, then it is a fatal symptom.

But there is another form of the disease which it is extremely difficult to discover, being attended with much less striking symptoms. "It steals along its fatal course with a step as silent as it is sure; and the destruction that marks its track is oftentimes alike unfelt by its victim, and undiscovered by his most watchful guardian." It does not attack until the sensibility is greatly diminished, in consequence of cerebral disease. Pain on pressure therefore is not felt—and there is often no purging. The tongue is generally

red at the edges and tip—loaded in the middle. The pulse usually runs up to 120. Recoveries do sometimes, though rarely, take place, even from this form—the favourable sign being *an increased tenderness of the abdomen on pressure.* This does not indicate increase of disease in the abdomen, but decrease of that in the brain.

The synochus gravior, with mixed affection, next occupies our author's attention, and the following extract will shew that it is not necessary to dwell on this part of the work.

"Since it has been repeatedly stated in the preceding pages that, in every case of fever, the brain, the lungs, and the abdomen are diseased, it may appear objectionable to call any particular class of cases mixed, because, according to the very nature of fever, all must be of this character. But for the same reason that we have designated one class of cases cerebral, another thoracic, and a third abdominal, namely, to mark prominence and intensity of affection, it is right to distinguish a fourth, in which all the three systems of organs are simultaneously affected with an equal, or nearly an equal degree of intensity. The term mixed is therefore by no means employed to intimate that the cases not comprehended under it are unmixed, but merely to point out a fact of great practical importance, that cases do occur which are neither in an exquisite degree cerebral, nor thoracic, nor abdominal, but which, at one and the same time, afford the most exquisite specimens of all the three.

"From this account of the sense in which the term is employed, it must be obvious that it will include the severest cases that can occur. If a patient be affected with intense cerebral disease he may be in great danger; but if he be affected with an equally intense thoracic disease his danger must be doubled; and if to this be added an equally intense abdominal disease it must be trebled. And accordingly these are just the cases which bid defiance to the most skilful and vigorous measures which the medical art can employ to control them; which seize upon their victim with a force which no human agency can resist nor counteract; which in malignant epidemics destroy life in a few hours or in a single hour, and in ordinary seasons in a few days." 143.

But whatever be the number of organs simultaneously affected, the nature of the affection in each is always the same. Disease in the brain is the same, whether the brain be alone prominently affected, or in common with the chest, the abdomen, or both. In like manner the symptoms, when any are present, are essentially the same, whether the disease exist alone, or whether it be complicated with several others. It would therefore be useless to detail the symptoms which occur in the mixed cases, since they must only be repetitions of those which have been already enumerated.

TYPHUS.

The 4th chapter of the work is on TYPHUS, which, like SYNOCHUS, is divided into the *Mitior* and *Gravior*—two degrees of intensity merely of the same affection. Nay, the typhus itself is only synochus in an aggravated form.

"The appearance of a person labouring under typhus is so different from that of a person affected with synochus, that no one ignorant of the disease, who saw these two patients for the first time, would believe that both were afflicted with one and the same malady. And yet dissection after death demonstrates, that the physical condition of the organs is precisely the same in both; and careful examination of the symptoms during life, shews that they are really identical, both in their nature and their succession, however, at first view, they may appear to differ. *The difference between these two diseases arises entirely*

from a difference in intensity; still this difference produces a very important modification in the character of the disease; important, because it materially affects both the safety of the patient, and the nature of the remedies that are best adapted to rescue him from his danger." 149.

From this passage it will be evident that Dr. Smith, while he labours to simplify the *nature* of fever, is tolerably complex in the *forms* dependent on degrees of intensity. Thus the typhus, which is acknowledged to be merely a higher grade of synochus, is first divided into mitior and gravior, and then subdivided into cerebral, thoracic, abdominal, and mixed. We are told that "the symptoms which denote this affection (typhus mitior) are perfectly similar to those which have been stated to characterize it in synochus, but they undergo certain modifications, the true nature of which appears to have been greatly mistaken," and this mistake seems to Dr. S. of such magnitude, that he thinks whosoever shall effectually correct it "will do the greatest possible service to medicine." This being the case we shall introduce a rather long extract, in order that the author's views may not be garbled or misunderstood by abbreviation.

"1. There can be no question that, from the very first commencement of the attack, as well as through the whole course of the disease, the prostration of strength, both physical and mental, is greater in typhus than it is in synochus. This greater loss of energy is indicated by every sign that can be conceived to denote it. The loss of power in the muscles which support and move the body is oftentimes so complete, as to be most alarming to the patient and his friends, while the contrast between the vigor and the torpor of the mind, in the course only of a few hours, is most striking. From the full and active exercise of its faculties, it becomes, in that short space of time, quite incapable of performing any intellectual operation. It is confused and stupid, always in a greater degree than in synochus, and sometimes to such a degree, even on the very first day of the attack, as to excite the utmost apprehension in every one around the patient who takes any interest in his fate.

"2. The chilliness is, upon the whole, greater and longer-continued than in synochus: yet there is less constantly shivering, and the heat, when it succeeds this state of chilliness, is seldom as great as in the latter; while there are cases in which the heat never exceeds the natural standard.

"3. The febrile uneasiness is greater; the restlessness is incessant; the face is pallid; the features are shrunk; the expression of the countenance is most peculiar; it is strikingly indicative of weakness and suffering; the experienced eye can tell at a single glance even at this early period, to which of the two types that countenance belongs. The pulse is always weaker and more rapid than in the corresponding stage in synochus.

"4. There are cases in which the pain of the head is equally severe as in synochus: but this may be justly considered as rare. In general it is less acute. Dullness, confusion, stupor, giddiness, are more common than severe pain, and are often the substitutes for it. Though some degree of pain be generally present, yet it is by no means uncommon for one or more of these sensations to occupy its place completely. Question the patient as much as you please, and he will tell you he has no pain; but it is evident, from his aspect and his manner, that he has little sensation of any kind. The eye is dull, heavy, stupid, without lustre: the old English word 'lac-lustre' expresses its character truly and strikingly. But it is remarkable, that while the pain in the head is only slight, the pains in the back, loins, and extremities, and, as the patient himself says, in the bones, are severe.

"5. When pain is present it diminishes sooner and disappears more completely than in synochus: when it is not present, the advancement of the disease is indicated by increas-

ing insensibility, and by the rapid transition of dullness or confusion into a state of stupor approaching to coma. The eye is already muddy, and it soon becomes injected and suffused. The skin over the body is generally warm, sometimes hot; over the head it is often hot. The face is usually pallid, but the pallidness frequently alternates with flushing. The change of dullness into insensibility more or less profound sometimes takes place as early as the second or third day: it is seldom that it is as late as the seventh or the eighth: it is postponed, when not prevented, by active and appropriate treatment.

"6. There is little or no sleep; the restlessness is great; there may be no violence; but there is abundance of inquietude.

"7. Delirium is more constantly present than in synochus; and when it comes it comes earlier, its presence is not unusual as early as the sixth or the seventh day; and it may appear still sooner, but that is rare. It consists of low muttering incoherence, rather than of loud and violent talkativeness; and is expressed in moaning rather than in screaming.

"8. The connexion between delirium and muscular tremor, between muscular tremor and subsultus tendinum, and between both, and the passing of the stools and the urine unconsciously, has already been pointed out. Like delirium, muscular tremor is much more constantly present in typhus than in synochus; and its relation to delirium is so close that it is sometimes observed to supervene on the very same day; frequently on the following day; and, if it appear at all, it is seldom longer absent than the third. Its degree likewise is commonly proportioned to the violence of the delirium; and though early and great delirium may appear without it, yet it very rarely appears without delirium; and in general all these symptoms form one series or train; pain disappearing, confusion of mind increasing, muttering incoherence supervening, and muscular tremor and involuntary and unconscious stools rapidly succeeding.

"9. In the commencement of the typhus the pulse is sometimes of good strength, and it may not exceed 90 in frequency; but as the disease advances it uniformly becomes weaker, smaller, and quicker; so that death rarely takes place before it has reached 120. In the severer cases it is weak, quick, and easily compressed at a very early period.

"10. The respiration is often not very obviously affected, but if it be attentively observed it will usually be found to be shorter and quicker than natural.

"11. The tongue is always foul on the first or second day; it seldom continues moist longer than three or four days; it is often quite dry as early as the fourth, especially on the body and at the root; the apex and the edges sometimes remain moist a day or two longer; but in a short time the whole tongue becomes perfectly dry and of a brown colour; as the disease advances the colour often changes to a darker and darker hue, until it becomes quite black; it is then frequently fissured into deep chaps, while the lips and teeth soon become covered with a black sordes. Were the sensibility not greatly altered, such a condition of the mouth and tongue must be attended with insatiable thirst; yet thirst is often not felt, although at other times it is considerable.

"12. In the early stage of typhus the skin is frequently hot; as the disease advances the heat lessens; through the greater portion of the disease it is moderately warm; towards its termination it becomes cool, and some days before death it falls below the natural standard. It is always of a darker colour than in synochus; the whole surface is of a dull and dusky tinge. Sometimes it is covered with a dun-coloured petechiæ, at others with petechiæ of a florid colour.

"13. During its progress, erysipelas, first appearing on the face, then extending over the scalp, and often down the shoulders and back, is very apt to occur. Excoriation on the back and hips often form sloughing sores of great malignity and extent, while enlargement, inflammation, and suppuration of glands situated in different parts of the body frequently appear.

"14. Typhus terminates much earlier, whether favourably or unfavouraby, than syn-

chus; if it terminate unfavourably death frequently takes place as early as the 10th or the 14th day, although if early and appropriate treatment be employed, the force of the disease is sometimes so much lessened that it is as protracted as synochus.

"Towards the termination of the disease, more or fewer of the symptoms which it has been stated occasionally to occur in synochus, supervene; but as these depend upon particular conditions of the brain, they will be detailed under the pathology." 155.

In respect to typhus gravior, we are happy to have Dr. Smith's authority for pronouncing it to be defunct in London—at least he has seen no example of it, either at the hospital, or in private practice. All those examples which approach to the descriptions of the disease, as left us by Huxham, and even Cullen, consisted of the mixed cases of typhus, to which allusion has been made. All these examples have appeared referrible to two classes —one, in which the arterial action is excessive—the other in which it is oppressed, or rather overwhelmed. In the *first*, the patient lies insensible, with delirium ferox, rapid and panting respiration, tender abdomen, dry, black tongue, quick, weak pulse, and pungent skin. In the *second*, he lies insensible also, with cold and dusky skin—swollen and livid countenance—heavy and oppressed breathing—pulse scarcely perceptible, and so rapid as to be innumerable. In this state the patient is almost as completely paralyzed as in the worst apoplexy, and the attack is nearly as rapidly fatal. Dr. S. observes that such forms of fever have been considered as exquisite specimens of diseases of debility; but to this he cannot subscribe. Where, says he, is the debility?

"Not in the disease, for that is of giant strength; not in the patient, for remove, if you can but remove, a part of the load that oppresses him, and instantly an intensity of action will be set up in the whole system, perhaps as great as it is capable of sustaining without the most imminent danger. The brain is overwhelmed by the intensity of its affection; the energy that should animate the system, and of which it is the great source, is withheld; but that energy is suspended, not destroyed; and the debility which seems to be the result is not real, but apparent, not direct, but indirect. The giant that lies prostrate on the earth, mastered by superior power, has still a giant's strength, though he do not at that moment put it forth: give him the chance of throwing off the load that keeps him down, and he will soon show you that he is not weak." 165.

It is remarkable, though not, we think, inexplicable, that the pathology of these intense cases should present a complete contrast to that of the less severe affections. "No morbid appearances are visible in the organs which are capable of accounting for death. There are signs of vascularity; the vessels are turgid with blood, and consequently the organs on which they are spent, are in a state of congestion." The reason why the products of inflammation are not found is, that there was not time for their formation.

We have one more chapter to analyze before we close this first article—and it is an important one, namely, the PATHOLOGY of fever.

"By carefully observing the symptoms in a large number of cases, we at length become acquainted with all the important symptoms that arise: by carefully examining the organs after death in a large number of cases, we gradually learn all the important changes in *structure* which they undergo; and by comparing in all cases, the morbid symptoms with

the altered states, we acquire in the end the power of ascertaining, with a high degree of probability, the presence of an event which we cannot see, by the presence of its sign which we can see." 177.

This would be true if the incipient changes were visible or tangible in their nature, and if they could be laid open in the early stages of fever. Our author confines his inquiries to the pathology of the solids, believing that the changes in these, are not only of far greater importance, but invariably antecedent to those in the fluids.

I. External Appearances after Death.

The skin is more dusky than natural—sometimes studded with petechiæ, or even purple blotches. The body appears emaciated—the muscular fibre is very dark—and this darkness extends even to the viscera.

II. Morbid Appearances in the Head.

The arachnoid membrane is more frequently affected than either of the others. It is either more vascular than natural, or thickened, opake, and milky—when in the latter state, there is generally a gelatinous fluid beneath it. There are often adhesions to the membrane above and below. The dura mater is less constantly changed in appearance, but it is sometimes more vascular than natural, or detached from the cranium in some places by effused fluid.

The pia mater is seldom changed in structure, but is generally preternaturally vascular. In like manner the theca vertebralis is often vascular, and contains more fluid than natural.

The brain itself is seldom perfectly sound. The changes consist of an altered state of its substance, cavities, or both. The most usual change in its substance is increased vascularity, sometimes on the surface, sometimes more deeply situated, existing in all degrees from a faint blush to a vivid redness. Mollescence and induration are occasionally seen after fever—sometimes partial, sometimes more general. Abscess in the substance of the brain does occur, but very rarely. The cerebellum is always found softer than the cerebrum. The morbid changes in the cavities are excess of secretion—varying from a drachm to several ounces. This excess of fluid is still more frequently found between the membranes than in the ventricles—especially between the arachnoid and pia mater. In this latter locality it is gelatinous—elsewhere, lymphous. Excessive vascularity and increased secretion are never co-existent—the latter being the effect of the former, the cause ceases when the effect is fully produced. The substance of the spinal cord is seldom changed, either in vascularity or consistence. The morbid appearances are chiefly confined to the coverings, and are similar to those in the coverings of the brain.

III. Morbid Appearances in the Thorax.

The mucous membrane of the bronchi is the most frequently affected, whatever be the type or degree of fever; and this affection, according to our author, is also "the most characteristic of the febrile state."

"Its disease is specific and uniform. It consists of preternatural redness. The character of this redness distinguishes it from that which is observed in ordinary inflammation.

It is uniformly and strikingly darker, the difference in colour being precisely that which subsists between venous and arterial blood. This darkness of colour apparent in the bronchial lining, increases in degree as the tubes of the bronchi diminish in size; while it may be only just discernible in the large trunks, the colour may be nearly black in the minute branches. This change in the natural colour of the membrane is indicative, not only of an increase in its vascularity, but of alteration in its structure. It is almost always attended with a preternatural thickening of its substance, as is demonstrated by cutting through the tube and reflecting the membrane. The tubes themselves contain more or less fluid, which consists of mucus, mixed with pus. Analogous to what has been stated with regard to the vascularity of the brain and to its secretions, when the quantity of secretion contained in the bronchial tubes is great, the degree of vascularity apparent in the membrane is lessened." 185.

In scarlatina the morbid changes are somewhat different. The mucous membrane covering the trachea, larynx, amygdalæ, and soft palate, is inflamed—the redness is of a more vivid colour than in fever without eruption—being similar to the characteristic colour of the scarlatina tongue.

When in every other respect healthy, the substance of the lungs in fever is so constantly found either gorged with blood, or infiltrated with serum, that these changes would seem to form essential parts of the morbid phenomena.

The pleuræ exhibit various degrees of vascularity, from the faintest blush to the most intense phlogosis—and every extent of adhesion, from the smallest point, to the complete obliteration of the thoracic cavities. The usual products of inflammation are likewise found equally varying in degree. The parenchyma of the lungs, besides engorgement and infiltration, presents hepatization and tuberculation in every variety and degree—ulceration and abscess—hæmorrhagic and calcareous depositions—and enlargement and melanosis of the bronchial glands. These changes, however, are not peculiar or essential to fever.

IV. MORBID APPEARANCES IN THE ABDOMEN.

The viscera always appear darker than natural, and generally more vascular. Several of the organs are affected in a uniform and peculiar manner---but the mucous membrane of the small intestines, especially of the ileum and cæcum, suffers most. The lesions are vascularity, thickening, ulceration. The vascularity or inflammation is often confined to the inferior extremity of the small intestines, when not the slightest deviation from healthy structure can be perceived in any other part of the canal. The second stage of disease consists in thickening of the membrane, or in deposition of matter beneath it in the situation of the mucous glands. The glands themselves are found in all states and stages of disease, from the least to the greatest enlargement, and from mere abrasion of surface to entire ulceration of surface.

The third stage is ulceration, which may supervene on either of the other affections, but the ulcer will not be the same in both cases.

"If ulceration take place while the mucous coat is in a state of simple vascularity, the ulcer will in general be extensive but superficial: its surface will present a smooth appearance, and its margin will be regular and defined: if, on the contrary, it occur after thickening of the membrane or enlargement of its glands, its characters will be just the reverse: it will be less extensive, but more deep, because it must penetrate a mass of adventitious matter before it can reach the other coats; and, for the same reason, its margin will be

more elevated and its surface more ragged. It is in this form of ulcer that perforation of the intestine generally occurs; in which case the mucous and muscular coats alone are ulcerated: the peritoneal gives way from gangrene.

"Whenever the mucous membrane is ulcerated, whatever be the form of the ulcer, the corresponding portion of the peritoneal coat is more vascular than natural; and perforation must be attended with inevitable death, on account of the extensive and intense peritonitis excited by the escape of fæces into the peritoneal cavity." 189.

The mesenteric glands are usually diseased in proportion to the other lesions already described. The pancreas, Dr. S. avers, is very constantly diseased in fever. It is always more firm than natural—the reverse of what takes place in the spleen. Sometimes it is nearly cartilaginous. As to the mucous membrane of the stomach, Dr. S. informs us that the uniform result of post-mortem examinations at the hospital is, "that the mucous membrane of this organ is less frequently, less severely, and less extensively diseased than any other portion of the same membrane." In no instance was ulceration found in the stomach. The liver is less frequently changed in structure than any other organ. The blood contained in it is always dark and fluid—its parenchyma is sometimes softer than natural—gall-bladder full of unhealthy bile, being either too pale and thin, or too dark and thick.

The preceding comprehend all the morbid conditions of the abdominal viscera which are peculiar to fever. The author then details a great number of cases and dissections illustrating the cerebral, thoracic, and abdominal pathology of the disease, and then addresses the reader thus:—

"And what is this pathology? What are the events, the detail of which has occupied us so long? The account of the pathology of fever is the history of inflammation, and the description of individual changes that take place in the organs that constitute the febrile circle, is an enumeration of various products of inflammation which are formed within them. There is scarcely a fatal case of fever that does not afford, in one or other of the organs of that circle, some inflammatory product; there is no considerable number of fatal cases which do not furnish a specimen of very inflammatory product. And what are the severest cases of fever, and why are they the severest? With the single exception immediately to be stated, the severest cases are those in which, together with a severe primary affection of the nervous system, this inflammatory action is in the greatest degree of intensity, and is seated in the greatest number of organs; and they are the most severe, not only on account of the severity of the primary affection of the nervous system, but also because it is in them that the inflammation is the most intense, and because that inflammation attacks the system at one and the same time in the greatest number of points. From among the preceding cases, fix upon any one in which the powers of life were, from the commencement, the most completely overwhelmed, and in which they were the most rapidly exhausted, and when the brief struggle for existence is over, examine the changes that have taken place in the internal organs—what is it that is found? traces of inflammation, legible, deep, extensive; while in almost every case, these traces are thus legible, deep, and extensive, in proportion to the apparent intensity of the fever, and to the rapidity with which it extinguished life." 324.

Unquestionably if pathology means morbid anatomy, the lesions must all be referred to inflammation and its products; but if pathology mean the whole morbid process of fever from beginning to end, the doctrine of in-

flammation will not hold good—even according to Dr. Smith's own shewing. In the succeeding section Dr. S. truly states that the functions of the brain and nervous system are the first, invariably, to be disturbed in fever; but of the nature of this primary functional disorder, we are ignorant. The phenomena of fever and inflammation, he thinks, prove "that the two diseases are not identical." The fever affection he regards as specific.

"This peculiar and specific affection appears to be much more analagous to the condition into which the nervous system is brought by the application of certain poisons, than to that which is proper to pure inflammation. The more closely and extensively the subject is investigated, the more clear and satisfactory the evidence becomes, that the great primary cause of fever is poison, the operation of which, like that of some other poisons, the nature of which is better understood, and the action of which has been more completely examined, is ascertained to be upon the nervous system. How these poisons act upon the nervous system we do not know, nor can we possibly know, as long as we remain so profoundly ignorant of the nature of the action of the nervous system in the state of health.

"It may be considered then as established, that the primary morbid condition of the body, in fever, consists of an affection of the nervous system, which there is reason to believe is of a peculiar and specific nature, although that nature be at present wholly unknown." 337.

The peculiar specific, and unknown affection of the nervous system, having continued for some time, brings the vascular system into a morbid state—and this state passes, "sooner or later into *true* inflammation." The second event then, that takes place in fever, is inflammation. But this inflammation Dr. S. thinks, "is never pure or simple." "The condition of the inflamed organs is never the same as that into which they are brought by mere phlegmasia:—there is always inflammation, *and something else.*" "That *something else* is the unknown but peculiar and specific affection of the nervous system, which is invariably antecedent of whatever subsequent affection may take place." "This affection of the nervous system is not only the invariable antecedent of every other condition, but it is omnipresent with every other condition, and its presence is a most powerfully influential presence." This combination of fever and inflammation, modifies the latter very much indeed, as well as the treatment which is to be used in its cure.

It has been stated by our author that there are two exceptions to the universality of the presence of inflammation in fever—in the mildest cases, and in those that are rapidly fatal. In the first case, the vascular action does not appear to rise into that grade which offers the common phenomena or products of inflammation—and in the second case, there is not time for inflammation to manifest itself by the usual proofs. In all the intermediate shades and grades, he thinks there is inflammation as surely as in pleuritis. This guarded theory, he conceives is not only the safe one in practice, but the only one that can explain the ratio symptomatum, and guide the methodus medendi.

"He who believes fever to consist of an affection of the nervous system alone, every other affection that may be combined with it being accidental, will rarely think of using the lancet: he who thinks fever to consist of inflammation alone, and overlooks the presence of nervous affection, will be apt to carry the employment of the lancet too far: he alone who embraces the view of both, brings within his own all the phenomena: he alone adopts a

sound theory of the disease, and we now see that he alone is likely to be led to a sound practice." 342.

Here we must allow our readers as well as ourselves to draw breath before, in another, but short article, we complete the analysis of Dr. Smith's and Dr. Tweedie's works. This completion will be in the present quarterly number, and will not therefore break the continuity of the chain of investigation.

VIII.

PRINCIPLES OF MILITARY SURGERY, COMPRISING OBSERVATIONS ON THE ARRANGEMENT, POLICE, AND PRACTICE OF HOSPITALS, AND ON THE HISTORY, TREATMENT, AND ANOMALIES OF VARIOLA AND SYPHILIS. Illustrated with Cases and Dissections. By *John Hennen*, M. D. F. R. S. E. Inspector of Military Hospitals. Third Edition. With Life of the Author, by his Son, Dr. *John Hennen*. London, John Wilson, Princes Street, Soho. Octavo, pp. 583.

WE have much pleasure in announcing a third edition of the late Dr. Hennen's able work on Military Surgery. As we have already fully reviewed a former edition, and the work is so well known and appreciated, we have little to do now but to notice any editions or corrections that may have been made.

The alterations are not very material---references to works are rather more numerous---there are also a few additional observations, and the plates, which increased the expense of the second edition, have been omitted---instead of which we have a brief but interesting biographical notice of the author. And, as it may prove interesting to many of our readers to trace the career of one of the most distinguished ornaments of military surgery, we will make a slight sketch from the materials his son has placed before us.

Dr. Hennen was born at Castlebar, County Mayo, Ireland, and passed the first eighteen years of his life in his native town, and studied medicine under his father, who was a practitioner of some eminence. During part of this time he was dresser at the County Infirmary---in due time he proceeded to Edinburgh, and studied under the second Monro and Dr. Black. In 1798 he received his diploma from the College of Surgeons of that city, and in 1800 was appointed assistant-surgeon to the 40th regiment of foot; he was aftewards removed to the 3d dragoons---and after serving in various parts of the Mediterranean, in Ireland, Scotland, &c. in 1809, he proceeded to Portugal, where his unwearied zeal attracted the attention of the head of the medical department, Sir J. Macgregor---and in 1811 he was promoted to the rank of surgeon to the forces, and had the charge of some of the most important surgical hospitals in the Peninsula. In the peace in 1814 he retired to Dumfries, and practised for a short time---in 1815 he was again

called into action, and after the battle of Waterloo he had the sole superintendance of the wounded General Staff. After performing duty at Portsmouth, &c. he was removed to Edinburgh in 1817, where he published his first edition of the work before us. In the Winter of 1820, he became a lecturer on Military Surgery, and in the same year published a second edition. In 1821 he was ordered to the Mediterranean, and finally was placed in charge of the Medical department of Gibraltar in 1826, where he terminated his arduous career, after thirty one years spent in active employment and devoted to the public service. In October, 1828, he was attacked with the yellow fever, of which he died early in the next month---and as a proof of his philanthropic zeal, it is stated that he was acting in the discharge of his duties up to a few hours of his death.

A monument has been erected by subscription to his memory in Gibraltar, as a mark of gratitude for his indefatigable exertions in the service of the inhabitants.

In conclusion, it is almost unnecessary to recommend the work to the attention of every young practitioner, but more especially to those entering the army---it is a work full of sound chirurgical knowledge---and abounds in the information which is most required by the inexperienced army surgeon.

IX.

A TREATISE ON POISONS, in RELATION TO MEDICAL JURISPRUDENCE, PHYSIOLOGY, AND THE PRACTICE OF PHYSIC. By *Robert Christison*, M. D. Professor of Medical Jurisprudence and Police in the University of Edinburgh. I. Vol. 8vo. pp. 700, price 16s. 1830.

SINCE the beginning of the present century, a third of which is nearly lapsed, only one systematic work on Toxicology has appeared in the English language---and that was a translation from the French of Orfila---and never finished. Two parts of his work were published in 1816, and the translator has the following passage in his preface. "It is to be hoped that his (Orfila's) example will be followed up by some of our own countrymen, possessed of talent and leisure, sufficient for the undertaking. By frequently repeated experiments, there is no doubt but this science may be brought to some degree of perfection." Fourteen years passed away, before one of our countrymen, possessed of the requisite talents, came forward as a systematic Toxicologist---and Dr. Christison is the man. Dr. Paris, indeed, from the circumstance of his dedicating 336 pages of his second volume of Medical Jurisprudence to the subject of Poisons, may be considered as a systematic toxicologist; but still, a seven years' increase of chemical knowledge, and accumulation of jurisprudential facts, and an extension of the investigation to double the space allotted by Dr. Paris, must render the present work, if ably executed, the standard of reference in this important department. That Dr. Christison is well qualified for the task, can hardly

be doubted, not only from the many scientific papers which he has published on poisons, but from his appointment to the chair of Medical Jurisprudence in Edinburgh. Dr. Duncan, too, who is evidently—indeed avowedly, the reviewer of Dr. Christison's work in the last volume of our venerated northern cotempory, has given a testimony in favour of the volume before us, which must have great weight with the public at large. "Considering (says Dr. Duncan) Dr. Christison as, in some measure, our professional son, we feel proud to acknowledge that he has effected what we, at no time, were able to perform, and, reversing the original meaning, to say of him, 'Sequiturque patrem non passibus æquis.' That such a work as the present was a desideratum, cannot be doubted—and that it will prove a standard reference for all classes of practitioners, we decidedly prognosticate. Of such a mass of elementary matters it will not be expected that we should attempt any regular analysis, though we shall select some particular subjects for distinct articles in this journal.

The importance of the study of toxicology is ably stated in a sensible preface. When indeed we look into the daily prints, not one of which is unfurnished with instances of murder, suicide, and accidental poisons—when we consider the interest attached to such catastrophies, and the rigid scrutinies by which they are brought to light—we cannot be blind to the necessity of a comprehensive knowledge of toxicology on the part of the medical practitioner, whatever be his rank or designation. But allowing that he was secure from giving evidence in a court of justice (which he never can be) the science of toxicology is highly important in the common avocations of his profession. It supplies antidotes for the various poisons---(and all medicines are poisons as well as remedies)---it elucidates the laws of the animal economy—and aids him in his inquiries into the action of energetic drugs. Thus to toxicology he owes the knowledge of albumen as an antidote to oxymuriate of mercury and verdigris—of bark against tartrite of antimony—of the alkaline sulphates against acetate of lead—of the earthy and alkaline chlorides for surphuret of potass—of ammonia and chlorine against hydrocyanic acid, &c.

The laws of absorption have been elucidated by the experiments of the toxicologist, who has introduced many valuable, active medicines into the practice of the physician, as strychnia for example. Still it is in medical jurisprudence that toxicology shows its power and extent to the greatest advantage. In cases of poisoning, the weighty part of the proof must necessarily concentrate in the medical evidence, since it can seldom be drawn, as in other kinds of homicide, from the attendant circumstances of the case. It is fortunate that the resources of the medical witness are generally commensurate with the serious responsibility imposed upon him. By semeiology he distinguishes the symptoms of poisoning from those of natural diseases—by pathology he discriminates the appearances in the dead body—by chymistry he discovers foreign substances of a deleterious nature in the body and elsewhere—and by experimental physiology he determines the value of evidence, from the effects of poison on the lower animals. To use the words of our author, toxicology "ranges over the whole vast field of medical learning, and draws together from a variety of quarters, facts and principles which are seldom at any other time viewed in combination. The resources of each science are thus made to try the accurracy and supply the

defects of the others; and the whole mass of knowledge is brought to bear in one direction with a force and precision worthy of its objects—the detection of crime, and the vindication of innocence.

Since our author's appointment to the jurisprudential chair in Edinburgh, he has been more extensively employed in the practice of toxicology than perhaps any physician in these islands. In his researches he soon discovered the numerous defects and deficiencies of works on toxicology—defects probably arising from the attention having been too exclusively turned to the means by which particular poisons may be proved to have been the cause of death—whereas the questions which actually occur in medico-legal practice are much more diversified.

At coroners' inquests, the medical man has often to inquire into cases which are really instances of natural death, though construed, from peculiar attendant circumstances, into murder. Hence he has not only to prove poison when actually administered, but be prepared to show the negative side of the question in a clear light, by proving that death arose from common disease. In these cases it often happens that only a general suspicion of poisoning exists, without any particular poison being indicated—and here the physician is called upon to say whether there is a certainty, probability, or possibility of poisoning, in a *general sense*. These questions, but little adverted to by preceding writers, are dwelt upon at great length by Dr. C. under the head of "Evidence of General Poisoning," of which we shall give a pretty full account presently. On trials before the high Criminal Courts the prisoner is usually charged with administering a particular poison, and also some poison unknown to the prosecutor. In some instances the evidence of the particular poison is merely presumptive—and that not strong, so that the charge is substantially one of poisoning in a general sense. "Convictions have been recently obtained under such charges, where no satisfactory proof existed what poison had been given." Dr. C. differs therefore from the German and French writers on Medical Jurisprudence, who all express an opinion that poisoning can never be completely substantiated, unless the particular poison be found out. It is highly improbable, however, that the evidence of general poisoning, drawn solely from a medical source, will ever convict an individual. There must be strong moral or circumstantial evidence to corroborate the medical.

In the chemical search after individual poisons Dr. C. has made it an invariable object to select processes, which are at the same time, delicate, conclusive, and easily managed by the inexperienced. This is a great recommendation of the work, especially when it is remembered that there are very few of these processes whose accuracy he cannot vouch for, in consequence of frequent trials made under the most difficult circumstances. Some of the processes are new, and, he thinks, preferable to any previously known. These are chiefly the processes of arsenic, mercury, and opium. Some improvements have also been suggested in the mode of detecting copper, lead, zinc, and oxalic acid. Dr. C. has made some experimental researches on the action of various waters on lead, the results of which are interesting.*

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* Many of the more important tests will be given in insulated articles of our Periscope.

The work is divided into two parts---the first (containing 80 pages) on general poisoning---the second (more than 600 pages) on individual poisons. Of the first part we shall attempt an analysis in this article.

Part I. On General Poisoning.

The first chapter is on the physiological action of poisons, and presents a succinct account of our present state of knowledge on this point. Of the corrosive and irritating effects of some poisons there is ocular demonstration; but of their *nervous impressions*, without any visible organic change, "few well authenticated and unequivocal instances are known." Mr. Brodie mentions a good example in the effects of monk's-hood on the lips when chewed, which causes a sense of numbness and tingling on the lips that lasts for some time, quite unconnected with any affection of the general nervous system. M. Robiquet felt the numbing impression of strong prussic acid even on his fingers. The application of opium and ticunas to the inner surface of the intestines of a rabbit by Drs. Philip, Morgan, and Addison, caused paralysis of the muscular contractions of the gut, without affection of the general system. The same effects have been observed from prussic acid by M. Coullon and others. These facts prove the existence of local impressions of a purely nervous nature, and support the doctrine of the sympathetic operation of poisons against the scepticism of some physiologists.

The influence of a poison can only be conveyed from one organ to another by the sympathetic operation above-mentioned, or by the entrance of the poison into the bibulous vessels, and its mixture with the tide of the circulation. In the infancy of toxicology, all poisons were believed to act by sympathy, or nervous impression:—Magendie's experiments rendered the doctrine of absorption almost universal.

"But the latest researches tend rather, in my opinion, to show that some poisons act by sympathy without entering the blood, and that, although many poisons do enter the blood, the operation even of these, nevertheless, consists of an impression made on the sentient extremities of the nerves and conveyed thence along their filaments to the brain or other organs." 5.

The physician who is in constant attendance at the bed-side of sickness, and who becomes familiar with the phenomena of disease, cannot doubt this reciprocity of influence among the various organs.

There is a large class of poisons, however, whose operation is so slow that absorption has time to take place, and most probably does take place. This subject is handled in a very able manner by our author.

Poisons are believed to act through the blood for the following reasons:—first, they disappear during life from shut cavities---that is, they become absorbed, of which numerous examples are on record, from the experiments of Coindet, Monro, Magendie, Brodie, Barry, and Dr. Christison himself. It has also been ascertained that the absorbing power of the different tissues makes a great difference in the result. The most rapid channel of absorption is from a wound, or by express injection into a vein. The surface of the serous membranes is a less rapid medium, and the mucous membrane

less rapid still. The activity of many poisons is in proportion to the absorbing power of these tissues.

"Lastly, of one poison, namely nux vomica, it has been proved, that if the extract be thrust into the paw of an animal after a ligature has been tightened round the leg so as to stop the venous, without stopping the arterial circulation of the limb, blood drawn from an orifice in a vein between the wound and the ligature, and transfused into the vein of another animal, will excite in the latter the usual effects of the poison, so as even to cause death; while, on the contrary, the animal from which the blood has been taken will not be affected at all, if a sufficient quantity is withdrawn before the removal of the ligature." 10.

To these strong arguments, physiologists on the other side of the question have replied, that, the disappearance of a poison from a short sac, as well as other experiments, only prove that poisonous substances do enter the blood, but do not prove that they are carried to the organs on which they act—or that such transmission is absolutely necessary.

"If by the same test (say they) which has been adopted by Vernière, we attempt to prove the existence of the poison in the arterial blood, or in the general blood of the body, our efforts will fail completely. If, for example, the carotid and jugular vein of one dog be divided, and both ends of each reciprocally connected by proper tubes with the divided ends of the carotid and jugular of another dog, and extract of nux vomica be introduced into a wound of the face or neck of one of them, this animal will perish in the usual time, while the other will remain unharmed to the last. This well devised experiment, which is mentioned by *Mr. Morgan* and *Dr. Addison*, in their conjunct inquiry on the action of poisons, proves that the poison is not carried with the blood to the organ which is acted on; although the above-mentioned experiment of Vernière also clearly shows that the poison really enters the veins where it is immediately applied.—The same reply may be given to the famous experiment of Magendie on the effect of the extract of nux vomica, when the part where it has been applied communicates with the body only by means of two tubes, which join together the divided ends of an artery and a vein. The experiment proves that the poison enters the blood and in substance reaches the trunk; but it proves no more. As to the experiment of Emmert it is sufficient to reply, that the maintenance of the circulation is essential to the right discharge of all the functions, and among the rest to the integrity of all the acknowledged functions of the nerves; consequently the non-action of a poison when a ligature is applied on the vessel which supplies the part where the poison lies, is no proof that the poison acts through the blood.—The argument which is drawn from the activity of many poisons corresponding with the absorbing power of the textures to which they are applied, has not been touched on by the supporters of action by sympathy, but will presently be seen to harmonize with that doctrine, according to its newest modification." 11.

Besides these negative arguments, several positive facts, of much weight, have lately been brought forward. One of these has already been alluded to, viz. the admirable experiment of Morgan and Addison, by which it appears that the arterial blood of an animal under the influence of poison, is not poisonous.

"But the same experimentalists have also shewn that if a poison be introduced into a great vein, with certain precautions for preventing its passage towards the heart, it nevertheless will act with unimpaired rapidity. Thus, if the jugular vein of a dog be secured by two temporary ligatures,—be divided between them,—and then re-connected by a tube which contains woorara, we find of course, on removing both ligatures, that the poison quickly begins to act. But it will act with the same quickness if we remove only the ligature farthest from the heart; which is incompatible with the notion that it must be

carried with the blood to the brain, the organ that is affected by it.—They have farther shown that the operation of poisons which appear to act through the blood, is not accelerated by introducing them into the artery which supplies the organ acted on. If the counterpart of the former of the two foregoing experiments be performed on the carotid artery instead of the jugular vein, the woorara does not act more rapidly, as we should anticipate, did this poison act through the blood: and, what is still more to the point, the action is not retarded when the poison is introduced in the same way into the femoral artery. On the contrary, in all the three situations, in the carotid artery, the jugular vein, and femoral artery, it acts with the same quickness; which is inconceivable if it act on the brain through the blood, since in the first situation it passes instantly into that organ, and in the last it accomplishes its course only after passing through the whole systematic and pulmonary circulation." 12.

All these contradictory facts are reconciled by the theory of Dr. Addison and Mr. Morgan. They conceive that the sympathetic action of some poisons is unequivocally established by the great rapidity of their effects---and this being admitted, they think it irrational to suppose that other poisons, causing the same or analogous symptoms, operate by absorption.

"In order to explain the continuance of the action of poisons when, as in Magendie's experiment, the part directly poisoned communicates with the trunk by blood-vessels only, or when as in their own experiment, the poison is introduced into a vein, but prevented from reaching the heart,—they suppose that like the other membranous cavities of the body, the inner surface of the vascular system is supplied with an expansion of nervous filaments, on which poisons produce their peculiar impressions, and from which these impressions are communicated along the nerves to remote organs. In order, however, to account also for the correspondence observed between the activity of poisons and the activity of absorption in the several textures to which they are applied, it would be further necessary to maintain, that the nervous expansion of the inner membrane of the blood-vessels, is more peculiarly fitted, than the sentient extremities of the nerves elsewhere, for receiving the impressions made by poisonous agents; nay perhaps, that it is the only nervous expansion which possesses that function, except in regard to those poisons which cause evident organic injury, such as inflammation or corrosion. This important doctrine is one towards which Mr. Morgan and Dr. Addison evidently lean, although they have not in their work adopted it explicitly." 12.

Dr. Christison himself thinks that all these ingenious experiments and theories do not contradict the general principle, that the bibulous veins, as the organs of absorption, perform a very material part in the operation of poisons. It remains indisputably established that at least many poisons enter the blood, although it is doubtful or improbable that any pass with the blood to pervade the structure of the organ acted on.

A distinguished American physician, whose name we do not at this moment recollect, argued some years ago, and supported his arguments by many facts and observations, that all medicines acted in this sympathetic manner on the body and its functions. And certainly if it be proved that poisons generally act through the medium of the nerves rather than of the blood-vessels, it cannot be doubted that medicines operate in the same way.

In respect to physiology, as well as medical jurisprudence, it becomes a matter of great interest to detect poisons in the circulating fluids. Now certain poisons, after being swallowed, have been detected in the blood, secretions, and excretions, the proofs of which we need not here enumerate.

The spirituous odour of the breath in men and animals under the influence of alcohol, is a proof of the presence of that poison throughout the blood. Nevertheless the more general rule is that poisons which appear to enter the blood, cannot be detected either in that fluid or in the animal solids. This may be owing to the minuteness of the quantities travelling the round of the circulation, or to their being thrown off by the various emunctories before death.

Dr. Christison next adverts to the "organs affected by the remote action of poisons." A few of the poisons, such as arsenic and mercury, appear to affect a great number of organs of the body at one and the same time. But much the larger proportion seems to act on one or more organs only, not on the general system. Many appear to act *sympathetically* on the heart alone. The mineral acids do not enter the blood, and all the symptoms they produce, excepting the direct effects of local injury, are those of depressed action of the heart—great feebleness, fainting, imperceptible pulse, cold extremities. In this way tobacco acts principally on the circulation, and so does the upas antiar, and some other poisons that act also on many other organs at the same time, as arsenic and oxalic acid. Some poisons act strongly, but not solely on the lungs. In poisoning by tartar emetic, the lungs are commonly inflamed and sometimes hepatized. The same effects have been observed after sublimate. A great number of poisons act on the brain, as evinced by convulsions, giddiness, delirium, paralysis, coma. Post-mortem effects, however, as congestion or extravasation, are rare and equivocal. It is probably true that most poisons that have a range of remote action, act through the medium of the brain. It will not hold good indeed with those that appear to act solely on the heart or spine, as tobacco and strychnia.

The action of poisons is greatly modified by several causes, as quantity, state of aggregation, chemical combination, mixture, differences in tissues, differences in organ, habit and idiosyncrasy. On all these modifying causes Dr. C. makes judicious observations, winding up this chapter with a short section on the treatment of poisoning generally, which consists in the administration of antidotes of two kinds—one of which takes away the deleterious qualities of the poison, by altering the chemical nature—the other controuls the poisonous action after it has begun, by exciting a contrary action in the system. Few antidotes of the latter kind are at all satisfactory in their operation, and consequently they are little trusted. It is chiefly to the changes introduced among the chemical affinities that the practitioner must look for the counter-poisons. The ingenuity of the toxicologist has supplied the materia medica with many of singular efficacy, as magnesia or chalk for the mineral or oxalic acids, albumen for sublimate, bark for tartar emetic, &c. In respect to external poisons, the grand object is to prevent the introduction of the deleterious substance into the circulation, or remove it from the local vessels which it has entered. With both these views, the cupping-glass, as illustrated by Dr. Barry, is the most efficacious antidote. Another mode is a combination of ligature with venesection.

"Suppose a fatal dose of extract of nux vomica has been thrust into the paw of a dog; M. Vernière applies a tight ligature round the limb, then slowly injects as much warm water into the jugular vein as the animal can safely bear, and then slackens the ligature. The state of venous *plethora* thus induced completely suspends absorption. The ligature

is next tied so as to compress the veins without compressing the arteries of the limb, and a vein is opened between the wound and the ligature in such a situation, that the blood which flows out must previously pass through the poisoned wound. When a moderate quantity has been withdrawn, the ligature may be removed with safety; and the extraction of the poison may be farther proved by the blood that has been drawn being injected into the veins of another animal, for rapid death by tetanus will be the result. It is not improbable that in this plan the preliminary production of venous plethora may be dispensed with; and then the treatment may be easily and safely applied to the human subject." 29.

We have now arrived at the second chapter of the work, discussing the "Evidence of General Poisoning."

The art of secret poisoning, which once made so much noise in the world, is treated with scepticism by our author. It is not likely that the practices of Toffana or Brinvilliers will ever be renewed. The evidence of the existence or non-existence of poisoning in general (that is, without reference to any particular poison) is derived from five sources—the symptoms, the post-mortem appearances, chemical analysis, experiments on animals—moral circumstances. It will not be uninteresting or useless to touch a little on each of these subjects, especially as they have been but imperfectly investigated by preceding writers.

I. EVIDENCE FROM SYMPTOMS.

Not many years ago questions of poisoning were decided by symptoms alone. But no such evidence is now trusted to, per se. Still the symptoms are great auxiliaries, and in some cases, as of mineral acids, arsenic, sublimate, and strychnine, they are almost conclusive. The chief characteristics of the symptoms in poisoning are that they commence suddenly, proceed rapidly to a fatal issue—that they increase steadily—are uniform throughout their course—begin after a meal—and appear when the body is in a state of health. The exceptions to each of these characteristics are very numerous, and so very evident that we shall not dwell on them. Thus the first characteristic is exceedingly liable to exceptions, where the dose is small. Arsenic, digitalis, strychnine, &c. may be introduced into the system slowly, and yet so as to produce their specific and fatal effects at last. Dr. C. makes many judicious observations on the natural diseases which may commence, proceed, and terminate in the way which poisons do, and which, of course, throw doubt on symptomatology taken alone. Thus, for example, with respect to the appearance of symptoms of poisoning "*very soon after a meal*," we know that this is the time at which some of the most fatal disorders commence, as apoplexy, cholera, perforation of the stomach from chronic ulceration, &c. At the same time it is to be recollected that the diseases which commence immediately after food, and proceed to a fatal and sudden termination, are few in number, and none of them by any means frequent. The occurrence of such a circumstance may therefore, justly be deemed suspicious. The same may be said respecting the other items above enumerated. The following passage is curious and interesting.

"On the other hand, if the symptoms do not begin soon after food, drink, or medicine has been taken (the circumstances being such as to exclude the possibility of poison being

introduced by a wound, by the lungs, or by any other channel but the stomach,) the presumption on the whole is against poisoning, and sometimes the evidence to this effect may be decisive. The principle now propounded may be often a very important one in the practice of medical jurisprudence; for when united with a little knowledge of the symptoms antecedent to death, it may be sufficient to decide the nature of the case. Thus it is sufficient, in my opinion, to decide the late celebrated case of the *Crown Prince of Sweden*. The Prince, while in the act of reviewing a body of troops on the 28th May, 1810, was observed suddenly to waver on his horse; and soon afterwards he fell off while at the gallop, was immediately found insensible by his staff, and expired in half an hour. As he was much beloved by the whole nation, a rumour arose that he had been poisoned; and the report took such firm root in the minds of all ranks, that a party of military, while escorting the body to Stockholm, were attacked near the city by the populace, and their commander, Marshall Fersen, murdered; and Dr. Rossi, the Prince's physician, after narrowly escaping the same fate, was in the end obliged to quit his native country. Now, no other poison but one of the most active narcotics could have caused such symptoms, and none of them could have proved so quickly fatal unless given in a large dose. It was proved, however, that on the day of his death the Prince had not taken any thing after he breakfasted; and an interval of nearly four hours elapsed after that till he fell from his horse. This fact alone, independently of the marks of apoplexy found in the head after death, and the warnings he had several times before it, was quite enough to show that he could not have died of poison, as it was incompatible with the known action of the only poisons which could cause the symptoms." 40.

We all know how often an outcry is raised against individuals or a family, when a member happens to die suddenly, the family itself not being in harmony with each other. In several instances of this kind, our author has been induced to dispense with an analysis, by resting on the criterion alluded to in the foregoing extract.

"A middle-aged man, who had long enjoyed excellent health, one afternoon about two o'clock returned home tired, and after having been well beaten by his wife went to bed. At a quarter past two one of his workmen found him gasping, rolling his eyes, and quite insensible; and he died in a few minutes. As his wife had often maltreated and threatened him, a suspicion arose that he had died of poison, and the body was in consequence examined judicially by *Mr. Newbigging* and myself. The only appearance of disease we could detect was a considerable tuberculation of the septum cordis and anterior parietes of both ventricles. This disease might have been the cause of death; for there is no disease of the heart which may not remain long latent, and prove fatal suddenly. But, as the man never had a symptom referrible to disease of the heart, it was impossible to infer, in face of suspicions of poisoning, that it must have been the cause of death; since the man might very well have died of poison, the disease of the heart continuing latent. Poisoning, however, was out of the question. The man had taken nothing whatever after breakfasting about nine. Now, no poison but one of the most active narcotics in a large dose could cause death so rapidly as in this case; and the operation of such a poison in such a dose could not be suspended so long as from nine till two. An analysis was therefore unnecessary." 41.

From the symptoms of poisoning *alone* then, as we said before, no certain criteria can be drawn, though much auxiliary information. We next proceed to the

EVIDENCE FROM MORBID APPEARANCES.

These, like the former, had great weight in evidence, but often with less reason. Except in the instance of a very few poisons, the morbid appear-

ances *alone*, can never distinguish between the effects of them and of natural disease or violent death. Lividity of the body, and early putrefaction are still thought by the vulgar to be signs of poisoning; though there is no foundation for such an opinion. In poisoning by arsenic, it is well known, that there is the reverse of early putrefaction. The post-mortem appearances are inflammation of the intestinal canal and its products in one class of poisons—congestion of the cerebral vessels in another class—and in a third a combination of the two. But neither set of appearances are invariably caused by the poisons which usually induce them—congestion of the brain is rarely caused by those which are currently supposed to induce them—and, in fine, most of the appearances of both kinds, are exactly similar to those left by many natural diseases. Still the post-mortem appearances are not to be neglected, as they will assist the investigator greatly, in connexion with other species of evidence.

EVIDENCE FROM CHEMICAL ANALYSIS.

This, of course, is the most decisive of all the branches of proof. It is esteemed most valid when the poison is detected in the stomach, intestines, or œsophagus—then in the matter vomited—and next, in articles of food, drink, or medicine of which the sufferer has partaken—and lastly in articles found in the possession of the prisoner. When poison is found in the stomach, a question may arise whether or not it was the cause of death. On this point our author has brought forward some curious illustrations from two very striking cases. The first occurred not long ago to Dr. Wildberg of Bostock.

"Wildberg was required to examine the body of a girl, who died while her father was in the act of chastising her severely for stealing, and who was believed by all the bye-standers, and by the father himself, to have died of the beating. Accordingly, Wildberg found the marks of many stripes on the arms, shoulders, and back, and under some of the marks blood was extravasated in considerable quantity. But these injuries, though severe, did not appear to him adequate to account for death. He therefore proceeded to examine the cavities; and on opening the stomach he found it very much inflamed, and lined with a white powder, which proved on analysis to be arsenic. It turned out, that on the theft being detected, the girl had taken arsenic for fear of her father's anger, that she vomited during the flogging, and died in slight convulsions. Consequently, Wildberg very probably imputed death to the arsenic. In this case the chemical evidence proved that poison had been taken; but an account of the symptoms and appearances was necessary to prove that she died of it.*—The other case occurred to *Pyl* in 1783. A woman at Berlin, who lived on bad terms with her husband, went to bed in perfect health; but soon afterwards her mother found her breathing very hard, and on inquiring into the cause discovered a wound in the left side of the breast. A surgeon being immediately sent for, the hæmorrhage, which had never been great, was checked without difficulty; but she died nevertheless towards morning. On opening the chest it appeared that the wound pierced into it, and penetrated the pericardium, but did not wound the heart, and although the fifth intercostal artery had been divided, hardly any blood was effused into the cavity of the chest. Coupling these circumstances with the trifling hemorrhage during life, and the fact that she had much vomiting and some convulsions immediately before death, Pyl satisfied himself that she

* "*Wildberg.* Praktisches Handbuch für Physiker, iii. 227."

had not died of the wound; and accordingly the signs of corrosion in the mouth and throat, and of irritation in the stomach, with the subsequent discovery of the remains of some nitric acid in a glass in her room, proved that she had died of poison."* 49.

We agree with our author that it is almost certain that the real nature of these two deaths would not have been discovered in this country, from the inattention to medico-legal investigations, on the part both of the profession and the bench.

We are next to inquire what are the causes which may remove the poison beyond the reach of the inspector—it may have been discharged by vomiting or purging—absorbed—or decomposed.

In the trial of George Thom for poisoning the Mitchells, on the Aberdeen Circuit, 1821, it was clearly proved that the deceased had died from arsenic, although none could be detected in the stomach, for the man lived seven days, labouring under incessant vomiting. In a case where the patient lived only five hours, Dr. C. could not detect more than a fifteenth part of a grain of arsenic in the contents and coats of the stomach. A case is related in an American Journal, where a man had swallowed an ounce of arsenic, and died in eight hours—yet no poison could be detected by chemical analysis. And yet it is singular how ineffectual vomiting often proves in the expulsion of some poisons from the stomach. Arsenic and others which are not easy of solution may remain adhering to the villous coats, notwithstanding repeated and violent efforts to dislodge them by vomiting.

In respect to absorption, it has several times happened that laudanum, and even solid opium has soon disappeared in bodies poisoned with these substances. Dr. C. and Mr. Newbigging could not detect laudanum in the body of one who undoubtedly swallowed it, and who died in about eight hours. Pyl has related a similar instance. Great errors have been committed by medical witnesses in consequence of overlooking the fact of absorption. Dr. C. alludes to a recent instance which happened at a Coroner's Inquest in London.

"A young man one evening called his fellow-lodger to his bed-side; assured him he had taken laudanum, and should be dead by the morrow; and desired him to carry his last farewell to his mother and his mistress. His companion thought he was shamming; but next morning the unfortunate youth was found in the agonies of death. The moral evidence was not very satisfactory; but that is of little consequence to my present object. The point in the case I would particularly refer to is the declaration of the medical inspector, that laudanum could not have been taken, because he did not find any by the smell or by chemical analysis in the contents of the stomach."† 52.

Lastly, the excess of a poison may be decomposed. Vegetable and animal substances may be altogether destroyed by the process of digestion. The case of a French soldier is related, who died in six hours and a half after swallowing two drachms of solid opium, none of which could be found after death, nor the smell of opium detected. Some mineral poisons, as sublimate, lunar caustic, hydrochlorate of tin, are also decomposed in the stomach, but they are not removed beyond the reach of chemical analysis. The decomposition is a chemical, not a vital process, and the base

* "Aufsätze und Beobachtungen, &c. ii. 122."
† "Morning Chronicle, Jan. 8, 1823."

of the poison may be found in the solid contents of the stomach under some other compound form. The decomposition of the body also may render it impossible to detect poison that has been actually swallowed. Oxalic acid may be dissolved and then exude—vegetable narcotics may putrefy, and Prussic acid may be volatilized. Arsenic, however, has been detected in the body fourteen months after interment.

EXPERIMENTS ON ANIMALS.

This is more equivocal than was once imagined; but our author thinks that some medical jurists have overstepped the proper limits in rejecting this species of proof in toto. Still it is not likely to be resorted to directly in cases of poisoning; but the practitioner should be acquainted with the opinions which have been given by others—too rashly no doubt—and which may be canvassed in a court of law. An important objection, indeed to this species of evidence, is the fact that what is poison to man is not always poison to animals, and vice versâ. It is curious that the cat and the dog are affected by almost all poisons exactly in the same way as man—the dog more particularly.

"In general poisons act less violently on these animals; thus two drachms of opium are required to kill a middle-sized dog*, while thirty-six grains have killed a man, and probably a much less quantity would be sufficient for the purpose. It appears that one poison, alcohol, acts more powerfully on them than on man. There are also some poisons, such as opium, which, although deleterious to them as well as to man, nevertheless produce in general different symptoms. Yet the differences alluded to are not greater perhaps than exist between man and man in regard to the same substances; and therefore I think it may be assumed, that, on the whole, the effects of poisons on man differ little from those produced on the dog and cat." 55.

On the whole, it appears that, in the present state of our knowledge, experiments or accidental observations on the effects of the contents of the stomach or matters vomited on animals are very equivocal in their import.

"At the same time I must observe, as with regard to the articles of food, drink or medicine, that the effects of some poisons on man may be developed so characteristically on animals by the contents of the stomach, as to supply very pointed evidence indeed. Of the force of this statement the following example is a striking illustration. In the case of a girl, who was proved to have died of accidental poisoning with laudanum, the inspector evaporated the contents of the stomach to dryness, made an alcoholic extract from the residue, and giving this to several dogs, chickens, and frogs, found that they were all made lethargic by it, some of them oftener than once, and that a few died comatose. Facts such as these, agreeing so pointedly with the known effects of the poison suspected, appear to me to yield evidence almost unimpeachable." 60.

A long section, of 13 pages, follows on moral or circumstantial evidence, containing many judicious and ingenious reflections and observations, but such as we cannot analyze. There is no doubt that the medical man, in the course of his professional investigation of the case, has excellent opportunities of acquiring information of the moral and circumstantial kind, which may often be of great advantage both to himself and the court. The heads of moral evidence, to which the medical practitioner ought to direct atten-

* "*Charret*, in Revue Médicale 1827, i. 514."

tion, while proceeding in his more immediately professional course, are the following.

"1. To suspicious conduct on the part of the prisoner before the event, such as dabbling with poisons when he has nothing to do with them in the way of his profession, conversing about them, or otherwise showing a knowledge of their properties not usual in his sphere of life:—2. To the purchase or possession of poison recently before the date of the alledged crime, and the procuring it under false pretences, such as for poisoning rats when there are none on his premises to poison, or for purposes to which it never is applied:—3. To the administration of poison, either in food, drink or medicine, or otherwise:—4. To the intent of the prisoner, such as the impossibility of his having administered the poison ignorantly, or by accident, or for beneficial purposes, alledged or not alledged:—5. To the fact that other members of the family, besides the deceased, having been similarly and simultaneously affected:—6. To suspicious conduct on the part of the prisoner during the illness of the person poisoned,—such as directly or indirectly preventing medical advice being procured, or the relations of the dying man being sent for, or showing an over-anxiety not to leave him alone with any other person, or attempting to remove or destroy articles of food or drink, or vomited matter which may have contained the poison, or expressing a foreknowledge of the probability of speedy death:—7. To suspicious conduct after the person's death, such as hastening the funeral, preventing or impeding the inspection of the body, giving a false account of the previous illness, showing an acquaintance with the real or supposed effects of poison on the dead body:—8. To the personal circumstances and state of mind of the deceased, his death-bed declaration, and other particulars, especially such as tend to prove the impossibility or improbability of suicide:—9. To the existence of a motive or inducement on the part of the prisoner, such as his having a personal quarrel with the deceased, or hatred of him,—his succeeding to property by his death, or being relieved of a burden by it,—his knowing that the deceased was with child by him." 62.

On all these points our author makes many sensible commentaries, which we are obliged to pass over, and proceed to the last chapter of this first part of the work.

IMAGINARY, PRETENDED, AND IMPUTED POISONING.

The leading points to be attended to in this kind of investigation are laid down by our author, and an actual example of each variety is given by way of illustration.

Imaginary poisoning can hardly occasion deception or embarrassment. The same hallucination which induces the belief of poison, will betray itself when the investigation bears upon the symptoms, the administration, &c. of the poison. Thus Dr. C. was applied to in a case of this kind lately, where a lady fancied that poison was administered to her. The moral particulars were all plausible enough. Camphor was the veheicle in which the enemy (a relative) had administered the poison; but, unluckily for the consistency of the story, she stated that the poison could only have been given in wine —that the wine had no particular taste—that she did not take ill till the day after drinking the wine—but that camphorous perspiration had exhaled from her skin from that time forward. Her illness turned out to be a slight general fever.

Feigned or pretended poisoning is much more apt to escape suspicion—and, when suspected, is difficult to develope satisfactorily, because the actor has it in his power to lay his plans with care, and even to make himself ac-

quainted with the properties of the poison whose effects he intends to feign. Still he can rarely enact his part so well as to deceive a skilful physician.

"In a case of feigned poisoning an excellent mode of investigation is, after hearing out the individual's own story to put a number of questions involving an alternative answer, one alternative being compatible and the other incompatible with the alledged nature of his illness. No unprofessional person could stand such a system of interrogation, if skilfully pursued. Not only will his answers be often wrong; but likewise his manifest perplexity how to answer will of itself supply evidence of his falsehood." 77.

Great attention must also be paid to the chemical analysis. The following case will illustrate many of the rules to be observed on such occasions.

"A young married female, in the seventh month of pregnancy, having been discovered by her friends to be secretly addicted to dram-drinking, appeared to be much annoyed in consequence of the discovery; and one evening was found apparently very ill by her husband on his return from work. She represented that she had taken arsenic with a view to self-destruction, that she was in great torture, and that she was sure she should soon die. It was accordingly found, on reference to a neighbouring apothecary, that she had the same forenoon purchased about a drachm and a half of arsenic, for the alledged purpose of poisoning rats; and in the bottom of a tea-cup, in which she said she mixed it, there was left a small quantity of white powder, that proved on analysis to be pure oxide of arsenic. Notwithstanding these strong facts, the mildness of the symptoms and the composure with which she complained of her tortures led her friends to suspect she was feigning. On investigating her case I first found, in further corroboration of her story, that the powder was no where to be found. But she then stated in reply to questions involving an alternative answer, that the arsenic had a sour taste, and that the pain began in the lower part of the belly and spread upwards. She likewise said that she vomited a mouthful or two into a chamber-pot twenty minutes after taking the poison, that she vomited no more until the apothecary was sent for, who gave her emetics of sulphate of zinc, carefully preserving the discharges, and that she only vomited when emetics were given. When I first saw her, five hours after the alledged date of the taking of the arsenic, the skin was warm and moist, the face full and flushed, the pulse frequent and firm, the muscular strength natural. The chamber-pot contained only a small quantity of the fæces of a child and apparently a little water but no matters of vomiting and no white powder. The fluid discharged in presence of the apothecary was found on careful analysis to contain a large quantity of zinc, but not an atom of arsenic. She gradually recovered from the illness under which she laboured at the time I saw her, and in two days she admitted she was quite well, but continued to insist that she had taken the poison." 78.

A remarkable trial for imputed poisoning occurred not many years ago, at the York assizes, where a man named Whalley was indicted for administering arsenic to Martha King, who was pregnant by him.

"The woman King swore, that the prisoner, after twice trying, but in vain, to prevail on her to take drugs for the purpose of procuring abortion, sent her a present of tarts, of which she ate one and a half,—that in half an hour she was seized with symptoms of poisoning with some irritant poison,—and that she continued ill for a long time after. Mr. Thackrah found arsenic in the tarts that remained untouched, and likewise in some matter that was vomited in his presence after the administration of an emetic, as well as in other matters of vomiting which were preserved for him between his first and second visits. Her appearance, however, did not correspond with the complaint she made of her sufferings, her pulse and tongue were natural, and on careful investigation the following inconsistencies were farther detected. 1. She said she felt a coppery taste in the act of eating the tarts, a taste which arsenic certainly never possesses. 2. From the quantity of arsenic in

the tarts which remained she could not have taken above ten grains while even after repeated attacks of vomiting, the alledged matter subsequently preserved contained nearly fifteen grains. 3. The first matters of vomiting contained only one grain, while the matter alledged to have been vomited subsequently contained fifteen grains. 4. The time at which these fifteen grains were alledged to have been vomited was not till between two and three hours after the symptoms began; in which case the symptoms would before that time have been violent. The prisoner was acquitted, and the prosecutor and another woman who corroborated her deposition afterwards admitted that they had entered into a conspiracy to impute the crime to him, because he had deserted her on finding that she was too intimate with other men." 80.

This brings us to the close of the first part of Dr. Christison's book; the whole of the second part—indeed almost the whole of the work, being on "individual poisons," many of which we shall notice separately in our Periscopic articles. Even what we have brought forward from this, which is little more than an introductory portion of the performance, must produce a favourable impression respecting its merits on the reader, but an examination of the whole will convince him that this is a standard publication;—one of the most valuable and necessary which he can place in his library—for study in leisure, as well as reference in the hour of emergency, perplexity, doubt —nay, danger.

X.

MEDICO-CHIRURGICAL TRANSACTIONS.*

PATHOLOGICAL RESEARCHES ON INFLAMMATION OF THE VEINS OF THE UTERUS, WITH ADDITIONAL OBSERVATIONS ON PHLEGMASIA DOLENS. By *Robert Lee*, M. D. Physician-Accoucheur to the British Lying-in Hospital.

We shall not be at the trouble of informing our readers that this is the age for morbid anatomy, because they must know it as well as we. When Cullen gave his celebrated sketch of the schools of physic, from the days of the old wives who preceded Hippocrates down to those of Sydenham and Boerhaave; when he portrayed the schisms that have ever raged between the empirics and the dogmatists; and when he framed his own dear nosologic system, little did he dream that a species of knowledge was growing into strength in the dead-house of the hospitals and the studio of the anatomists, which should rival, perhaps overthrow, the theories and the theorists of medicine, and strangle nosology even in its birth. So it seems to be, and the cry of the morbid anatomists and preparation men is—vivent les bouteilles—à bas les nosologies! The whole of the present "part" of the present "volume" of the Medico-chirurgical Transactions is occupied with subjects of morbid anatomy, or something very like it, the first seventy-four pages being a memoir on Adventitious Structures, by our indefatigable friend Dr. Hodgkin; and the last sixty-eight on the Veins of the Uterus, by Dr. Lee. The intermediate matter, consisting of a paper of thirty pages, on Lithotomy, by Dr. Yellowly, completes the "part," which is hardly so weighty, either in bulk or in materials, as some of its predecessors.

The article which we have selected for analysis, Dr. Lee's, is one of much interest in several points of view. Whether we look upon it with reference to venous inflammation generally, to inflammation of the uterine veins in particular, or to the pathology

of phlegmasia dolens, it is calculated to give birth to some reflections in the minds of those who have paid any attention to these subjects. From circumstances, with whichwe need not trouble our readers, we have seen a good deal of phlebitis, and, consequently, we come to its consideration with a mind more pre-occupied than was a certain President's of the Board of Trade, who announced as his political creed, that his brain was as "a sheet of blank paper." At the same time, we hope we have no material prejudices to clog our sensorial machinery, none, at least, that will obstinately blind us to the perception of truth when she stands before us. So much for ourselves.

Dr. Lee informs us that, in a former communication on Phlegmasia Dolens,* he was led to infer, that inflammation of the iliac and femoral veins "gives rise to all the phenomena of that disease in puerperal women." It will be observed that there is a degree of ambiguity in this passage, for we are left in the dark as to whether such venous inflammation is a cause, amongst others, of the phlegmasia dolens, or whether it is viewed by the Doctor as the whole and sole one. We believe that, taking in the uterine veins, the latter is his opinion; an opinion on which we have joined issue with him before, and will be compelled to join issue with him again. But we anticipate;—let us revert to Dr. Lee. "Subsequent dissections have enabled me," says he, "not only to confirm the accuracy of my former observations, but have led me to discover the important pathological fact, that, in phlegmasia dolens, the inflammation commences in the uterine branches of the hypogastric veins, and subsequently extends from them into the iliac and femoral trunks of the affected side." Here, again, the passage is obscurely or ambiguously worded, for the reader cannot certainly tell, whether the author does or does not affirm inflammation of the uterine veins to exist in all cases of phlegmasia dolens. If the former, we leave him to explain the occurrence of the disease in the male, in whom uterine veins have not hitherto been discovered; if the latter, we must say that the text might have been more explicit. In order to establish the truth of views thus imperfectly explained, Dr. Lee subjoins a number of cases, of which we shall select and condense as many as our limits will enable us to comprise within this article.

Case 1.—*Inflammation of the principal Abdominal Veins and those of the right Inferior Extremity.* Mrs. Edwards, æt. 35, was delivered of her second child after a natural labour, and a fortnight afterwards, viz. April 9th, 1829, was attacked with pain in the calf of the right leg, and loss of power of that lower extremity. On the 13th, the limb was swollen without discoloration, and the inner surface of the thigh to the groin was very tender upon pressure. On the 16th the swelling was universal, the integuments pale and glistening, and not pitting upon pressure, great tenderness along the course of the crural vessels, and the vein, from the groin to the middle of the thigh, indurated, enlarged, and exquisitely sensible. There was also great sensibility in the ham, and along the inner surface of the leg to the ankle, where some branches of the superficial veins were hard and painful upon pressure. There was little pyrexia, had been no rigor, and she said that the veins of this extremity had been the most distended during pregnancy. Twelve years previously, after the birth of her first child, she had experienced a similar attack in the same limb, which remained in a weak condition for several months.

The affection of the thigh diminished after the lapse of a week or ten days, but she became affected with rigors, quick pulse, &c. and complained of considerable uneasiness between the umbilicus and pubes and in the loins. The rigors came on every afternoon and were followed by heat and perspiration, the attacks of pain were acute, there was slight delirium at night, the fever was typhoid, there was soreness around the umbilicus, and pulsation in the epigastrium. These symptoms declined, but on the 20th of May she had another violent rigor, vomiting succeeded, and pain in the left side on deep inspiration;

* Page 132 of the present volume.

then appeared great prostration of strength, a peculiar sallowness of the skin, inflammation of the right eye, and delirium at night. The left eye also inflamed, the prostration increased, rigors took place from time to time, with hacking cough, diarrhœa, more or less insensibility, and the usual symptoms of typhus. On the 31st of May the eyes were so much swollen that they seemed pushed out of their sockets, and vision was entirely lost. On the 2d of June, a red puffy swelling appeared over the right elbow-joint, and on the 15th she died.

Sectio Cadaveris. Present, Drs. Sims and Locock.

"*Thorax.*—In its left cavity were contained upwards of two pints of a thin purulent fluid, and extensive recent adhesions existed between the pleura covering the lower margin of the superior lobe and the pleura costalis. The surface of the inferior lobe was coated with a thick layer of flocculent coagulated lymph, as was a corresponding part of the pleura costalis. The substance of this lobe was of a dark colour, approaching to black, and soft in texture, so as to be readily broken down with the fingers. In its centre about an ounce of thick cream-coloured pus was found deposited in the dark-coloured and softened lung. This was not contained in any cyst or membrane, but infiltrated into the pulmonary tissue.

"In the right cavity of the chest recent adhesions also existed at the inferior part. A considerable portion of the right inferior lobe was entirely changed from the healthy structure, being converted into a dense, solid, dark red coloured mass. On the anterior surface of this lobe the pleura was elevated as if by a hard irregular tumour, but when cut into, no pus escaped from this part, and it presented only the appearance of the surrounding portions of lung with a greater degree of condensation.

"*Vena cava inferior.* Coats of the vessel considerably thickened, and the internal, where visible, of a scarlet colour; its whole cavity occupied by a coagulum, distending it to its utmost extent, and terminating in a loose pointed extremity about an inch below the entrance of the vena cava hepatica. The coagulum, covered with a membranous-like investiture of a bright red colour, throughout firmly, and in many places inseparably adherent to the inner lining of the vein; the substance within it varied in consistence and colour, in some parts it presented the appearance of coagulable lymph, in others it was a pultaceous dull yellow mass, made up apparently of pus and lymph blended together. The exterior of the firmer portions were separated into layers, which gradually disappeared as they approached the centre. The mouths of all the veins emptying themselves into the cava were sealed up, the emulgents excepted, the coagulum, near the entrance of these vessels, hanging loosely within the cava.

"*Left common iliac and its branches.* Its interior plugged up with a continuation of the coagulum from the cava, and differing in no respect from it either as to consistence, colour, or the firmness of its adhesions to the inner tunic of the vein; it was continued beyond the entrance of the internal iliac, (which it completely closed,) and terminated in a pointed extremity about the middle of the external iliac; neither the remainder of this vessel nor the femoral vein exhibited any morbid changes. The internal iliac was much contracted and lined with a thick adventitious membrane.

"*Right common iliac and its branches.* This vessel was contracted to more than one half its natural size; it was firm to the touch, and of a grayish blue colour, to its internal coat adhered an adventitious membrane of the same colour, containing within it a firm coagulum, made up of thin layers of dense lymph. The internal iliac was rendered quite impervious by dense dark-coloured bluish membranes, and at its entrance into the common iliac was converted into a solid cord.

"The contracted external iliac contained within it a soft yellowish coagulum, similar to the one in the cava; its coats were three or four times their natural thickness, and lined with dark-coloured membranous layers.

"The *femoral vein*, from Poupart's ligament to the middle of the thigh, was diminished in size, and almost inseparable from the artery. Its tunics were thickened, and its interior coated with a dense membrane surrounding a solid purple coagulum strongly adherent to it. The superficial and deep femoral veins were in a similar condition, and the saphena major and minor differed from the femoral veins only in the size of the coagulum they

contained, which was slender, and had formed no adhesions with the layers of lymph lining their cavity.

"The cellular membrane and other textures of the limb were in a perfectly healthy condition, and in size and appearance there was externally no visible difference between the two extremities.

"The morbid alterations of structure now described, can still be distinctly seen in the preparation of the diseased veins, and have been represented with great accuracy in the beautiful drawing made by Mr. Perry, from the parts, immediately after their removal from the body." 378.

In the second case the patient was confined in the latter part of March, whilst labouring under the phthisical symptoms, and on the 4th of May experienced soreness in the left groin which gradually extended along the inner surface of the thigh to the ham, and thence along the back of the leg to the foot. In twenty-four hours the limb began to enlarge, and the swelling became hot, painful, and colourless, pitting nowhere on pressure, except over the foot. Motion produced excruciating pain along the inner surface of the thigh, and the pain along the track of the femoral vein was so acute that the condition of this vessel could not be ascertained. Several branches of the saphena above the knee were distended and hard; pulse 120; tongue red and glossy. On the 11th the femoral vein under Poupart's ligament could be felt enlarged and indurated, on the 17th there was less pain at the groin and in the course of the vessels, the pulmonay affection became agravated, and in the morning of the 24th she died.

Sectio Cadaveris. Vomicæ, &c. in the lungs. Left common, external, and internal iliac veins all impervious, with various alterations of structure. Common iliac at its termination reduced to a very slender tube, lined with a bluish slate-coloured adventitious membrane. Remainder of the common and external iliac veins coated with a dark-coloured membrane, and their centre filled with a brownish ochrey-coloured tenacious substance, rather more consistent than the crassamentum of the blood.

Left internal iliac vein in some places reduced to a cord-like substance, and its cavity throughout completely obliterated; its uterine branches completely plugged up with firm reddish coagula of lymph. Branches and trunk of right hypogastric vein affected in same way as left. Coats of left femoral vein thickened, and closely adherent to the artery and surrounding cellular substance; its whole interior lined with an adventitious membrane, and distended with a reddish coloured coagulum. Same morbid appearances in deep and superficial branches as far as examined down the thigh.

Case 3.—*Phlegmasia Dolens—Iliac and Femoral Veins inflamed.* Mrs. Mason, æt. 42, was delivered Aug. 1, 1929, of twins, and before the expulsion of the placenta had nearly perished of uterine hæmorrhage. Much tenderness of the uterus remained till the 27th, when she had a violent rigor, succeeded by fever, and pain in the right iliac region and groin. On the 28th the pain increased and extended towards the ham, and in the evening the limb swelled, on the 29th, the femoral vein for several inches under Poupart's ligament was felt enlarged and painful; tenderness in the right side of the hypogastrium; deep seated acute pain in the lower part of the spine on motion; depression. Sept. 8. Less pain in limb—femoral vein still enlarged and painful—foot and leg pit—rigors and occasional attack of diarrhœa. These symptoms continued with little variation except that she complained of tenderness in the left groin and thigh, and was at times delirious. Before her death, which happened on the 22d, both inferior extremities were œdematous.

Sectio Cadaveris. The veins presented nearly similar appearances to those observed in the preceding cases. On the right side the iliacs were affected and imbedded in a mass of suppurating glands and pus which extended in the cellular membrane along the psoas muscle to Poupart's ligament. Lower two inches of the vena cava affected like the iliacs. On the left side the common, external iliac, and hypogastric veins contained soft adherent coagula, and the latter vessel was somewhat contracted and thickened in its coats.

The three succeeding cases were not fatal, and consequently no opportunity was afforded of establishing in a positive manner the existence of phlebitis. In all, however, there was pain and induration in the course of the femoral vessels, much swelling of the thigh or of the limb and tenderness to touch, slight pitting upon pressure, and more or less constitutional disturbance and depression. In the second, or fifth, case, the inguinal glands were enlarged and suppurated.

Some remarks are made on the preceding cases by Dr. Lee with the view of showing that phlebitis did actually exist, and that it originated and "generally commences" in the branches of the hypogastric, or uterine veins. The first of these conclusions will admit of no dispute, and need not be dwelt on further; the latter is rendered probable by the cases brought forward by the Doctor, as well as by the mention of others which he cites from various authors. Mr. Wilson in the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, Vol. II. relates three cases of inflammation more or less extensive of the vena cava, iliacs, and uterine veins, in none of which was there *one of the symptoms of phlegmasia dolens.* MM. Meckel, Bouillaud, Lawrence, Velpeau, and Guthrie, with Drs. Davis and Gooch, are quoted in support of the position in question, some of them satisfactorily, others not. This marshalling of cases and array of authorities, some of which may be said to be rather *pressed* than fairly enlisted, is terminated by Dr. Lee asserting that "phlegmasia dolens must now be considered as merely one of the remote consequences of uterine phlebitis."

Dr. Lee proceeds to trace the mode in which uterine phlebitis is set up, its progress symptoms, and sequelæ. Generally the "spermatic veins alone are affected, and for the most part that on the side of the uterus to which the placenta has been attached; and inflamation being once induced it is liable to spread continuously to the veins of the whole uterine system, of the ovaria, fallopian tubes, and broad ligaments. The vena cava itself may become affected, but this occurrence is not frequent, the disease being usually arrested at the entrance of the spermatic into the vena cava on the right side, and of the emulgent into the same vessel on the left. If, as sometimes happens, it pursue the direction of the kidneys, the substance of these organs, as well as their veins may be involved in the mischief. The hypogastric veins are seldom affected on both sides, and rarely inflamed in comparison with the spermatic.

"Uterine phlebitis appears to result from the mechanical injury inflicted by protracted labour, from the force required for the extraction of the placenta in uterine hæmorrhage, from retained portions of placenta undergoing decomposition in the uterus, the application of cold, and probably of contagion, and from various unknown causes operating on the uterine system after delivery.

"It is perhaps impossible to determine for the most part, the precise period of its invasion, from the total absence of local pain, and of other symptoms; but it is probable that it most frequently begins soon after delivery, and remains stationary for a time around the orifices of the uterine veins, as phlebitis has been observed to do, where it occurs after venesection. Of this, however, we can have no certain proof, nor can it be admitted to be a general occurrence, from the rapidity with which the inflammation has been found to attack the uterine, spermatic, and renal veins. In one case the disease proved fatal on the evening of the fifth day after labour, and on dissection, all these veins were found disorganized.

"It may be stated, as the general result of all the observations hitherto made on uterine phlebitis, that it occurs most frequently from the 10th to the 20th day after parturition, though it has been observed to commence at an earlier, as well at a much later period.

"Where the veins alone are inflamed, the peritoneal and muscular tissues remaining unaffected, there is often either no pain or a dull pain, with a sense of weight in the region of the uterus, and no other local symptom by which the disease can be recognized. The uterus too may return to its usual reduced volume or nearly so, and it is only on the accession of the constitutional symptoms, which have been already detailed, that the existence of this insidious and dangerous affection can be determined. If the substance of the uterus

be affected, this organ remains above the brim of the pelvis, large, hard, and painful on pressure, as in puerperal peritonitis.

"With regard to the lochial discharge, it has sometimes been observed to be fœtid, and puriform, and at other times in a perfectly natural state." 404.

The constitutional symptoms of uterine phlebitis are like those of phlebitis elsewhere, and need not be enumerated after what has been said in recent numbers of this Journal. Dr. Lee is induced to believe that the disease is of much more frequent occurrence than has hitherto been suspected, and "that to it must be referred many of the fatal disorders of puerperal women which have usually been comprehended under the vague designation of puerperal fever or peritonitis." According as the serous, muscular, or venous tissue of the uterus may be affected, will the forms of puerperal disease, in Dr. Lee's opinion, be inflammatory, congestive, or typhoid.

A kind of halting-place now occurs in the paper and we cannot have a better opportunity than this of making the few remarks which we intend to offer on the subject. Our readers are probably aware that we have on several occasions dissented from the pathology of phlegmasia dolens first promulgated by Dr. Davis, subsequently supported, and now extended by Dr. Lee. Our opposition neither originated in a spirit of opposition, nor was continued in one of obstinate pertinacity. We believed, in the first instance, that Dr. Davis had not proved his case, and though our opinion may be modified, it certainly is not subverted by what has since occurred. Not to go over the grounds of our opposition to the theory which places the exclusive origin of phlegmasia dolens in inflammation of the veins, we may here allude to some circumstances deserving of consideration.

It cannot fail to be remarked that a considerable discrepancy exists between the disease as described by the older writers, and many of the cases detailed in these modern papers. Mr. White, who wrote in 1784, mentions that out of 1897 women delivered at the Westminster General Dispensary, five only were attacked with phlegmasia dolens; and out of 8000 delivered at the Manchester Lying-in-Hospital, and their own houses, only four;—whereas our modern practitioners would appear to find them as plenty as blackberries. Again, the phlegmasia dolens of the old school is by no means a fatal disease, on the contrary Mr. White declares that, when not complicated with any other disease, he has never known it have a fatal termination. Dr. Hull, to be sure, informs us that he has seen cases end in suppuration, and even in death, but he speaks of these as somewhat rare occurrences. Now the phlegmasia dolens of the new school is one of very great danger indeed, attended with grave and typhoid symptoms, and followed by sequelæ never alluded to before the present day.

But this is not all. Not only are these great discrepancies between the disease as described of old and of latter years, but even amongst the several cases of our modern phlegmasia dolens. If the old descriptions are to be taken as a standard of the disease, then some of the cases related by Dr. Lee and others must certainly be rejected. Take for instance the first case on the list, that of Mrs. Edwards; it is an excellent specimen of the consequences, immediate and remote, of inflammation of the veins, but none of phlegmasia dolens. The same may be said of some others, more particularly of the three cases quoted from the paper of Mr. Wilson, in which there was plenty of phlebitis, but not a morsel of phlegmasia dolens. Dr. Lee endeavours to get out of this scrape by supposing that the inflammation of the hypogastric vein *only* produces the disease *when* it has extended into the principal veins of the extremity. The reasoning is hardly logical, indeed may well admit of the reductio ad absurdum were any one inclined to apply it, but it is upset by the fact of phlegmasia dolens occurring in the male, in whom it had no uterine veins to arise in. But allowing, as we are really inclined to do, that inflammation of the iliac and femoral veins in the female after parturition, does commonly originate in the uterine branches, still if it can be proved that the swelling of the limb is only set up when the latter is established, the two must be connected as cause and effect, by all the rules of right reasoning and the dictates of common sense.

When we look at the instances of phlebitis which the practice of surgery affords, we are equally at a loss to discover a state of things corresponding to phlegmasia dolens. In inflammation of the veins of the arm after venesection, it is true that swelling of the limb takes place, but there is generally much disposition to œdema, and more or less discolouration of the integuments. In inflammation of the saphenæ or femoral veins, the same is frequently observed, and even when the skin remains white, there is more œdema than in the old, and we may say orthodox phlegmasia dolens. Nay, in some cases of inflammation of the iliac and femoral veins which we have witnessed there was little or no perceptible swelling of the limb at all, and none of that exquisite pain on pressure which characterizes the affection under consideration.

Case. A young man, 22 years of age, was admitted into St. George's Hospital under the care of Mr. Hawkins on the 15th of November, 1829, with severe gun-shot wound of the right arm and elbow-joint. He refused to submit to amputation, and attempts were made to save the limb, but swelling, erysipelatous inflammation, and sloughing of the cellular membrane of the limb succeeded, with diarrhœa, prostration, cough, and muco-purulent expectoration. From this state he rallied, whilst a wasting suppuration was set up in the limb, and the night-perspirations with the other symptoms of hectic were profuse. On the 21st of December the limb was amputated. For a few days he appeared to be doing well, but on the 26th it was necessary to open a large abscess over the sacrum, when half a pint of fœtid pus mixed with blood was evacuated. The night-sweats persisted, on the 1st of January he had a long-continued rigor, the soft parts of the stump retreated from the bone, and on the 4th the poor fellow died.

Sectio Cadaveris. Adhesions of pleuræ on left side of chest—consolidation of lungs, not peripneumonic—hepatization of the lungs in parts—a small abscess, the size of a pea, on the surface of the right lung—no tubercles.

Large sloughy abscess over the sacrum, with portions of dead bone exposed, and a great quantity of coagulated blood. Another large abscess in the left side of the pelvis, extending from Poupart's ligament to the sacro-sciatic notch, but not communicating with the former abscess. External iliac and femoral veins in the neighbourhood filled with half-organized, laminated coagulum, semipurulent in its centre.

An abscess in the calf of each leg.

In this case there was no perceptible swelling of the limb whatever, nor had the slightest pain in it been complained of during life. In another case of inflammation and obstruction of the femoral vein, which we witnessed some time ago at the same hospital, there was tenderness in the course of the vessels, but little swelling, and that not resembling, in the slightest degree, the phlegmasia dolens. The case was that of a man named Frederick Wells, whose leg was amputated by the late Mr. Rose, for compound fracture of the ankle-joint; it was published in the Medical Gazette, and has been copied into Mr. Arnott's memoir on Phlebitis. In a man whose thigh was amputated last Summer by Mr. Keate, and in whom the femoral and iliac veins inflamed, there was not even pain on pressure, and no swelling of any consequence. We might mention some other examples of precisely the same description, but it would merely be exhausting the patience of our readers to no purpose.

From the arguments we have adduced, the facts we have observed, and some other considerations, into which we cannot enter at present, we are led to doubt and dispute the correctness of Dr. Lee's position, that phlegmasia dolens is now to be considered as merely one of the remote consequences of uterine phlebitis. But while we think that Dr. Lee, and the other medical men who have laboured in the same vineyard with him, have failed in establishing the soundness of their opinion as an axiom in pathology, we are willing to admit, and ready to avow, that they have effected a great deal in this department of medical science. They have proved that many cases, so closely resembling phlegmasia dolens as *hardly* to admit of being distinguished from it, are essentially inflammation of the iliac

or femoral veins; and they have rendered it probable, that the majority of the instances of that affection are dependent immediately or remotely on venous inflammation. We cheerfully make this acknowledgment, which is due to the perseverence and laborious research of Dr. Lee and his confrères.

Farther than this we cannot go, nor, in the present state of our knowledge, do we think it would be right to do so. It is much more reasonable and philosophic to advance cautiously, than to rush on with precipitate rashness; in the first case the progress is sure, although it may be slow—in the second we may fall into fatal dangers; and even if we escape, it is only at the expense of toilsome retreats, and many a bewilderment amidst the treacherous mazes of error.

We believe that many of the disputes on the nature of phlegmasia dolens are like the celebrated rencontre between the knights on the different sides of the shield, or the quarrel in the fable on the colour of the chameleon. It seems to us that the enlargement of the extremities in parturient women, and in patients, male and female, not parturient, are of many and various kinds. Surely nothing can present a greater contrast than an ordinary case of phlegmasia dolens, and one of those frightful cases of venous inflammation described in the present paper and in others, in which purulent depositions take place in various parts of the body, in the joints, in the cellular membrane; with sloughing of the eyes, gangrene and sloughing of the lungs, the worst description of typhus, and so on. Surely such cases must differ in something more than in degree; surely it is natural to conclude that the lower extremities are subject to several various affections, of very opposite degrees of suffering and danger. Take for instance the following case, related by Dr. Lee, of "severe affection of the joints after parturition."

Case. "Mrs. Pope, æt. 40, No. 7, Feathers Court, Drury Lane. She was delivered on the 26th Oct. 1827, of her fourteenth child after an easy labour, and appeared to recover favourably until the 3d of November. Without any obvious cause, she was then suddenly attacked with a severe rigor, which was speedily followed by intense headach, vomiting, general soreness of the abdomen, and suppression of the lochia.

Nov. 6th, 1827 (eleventh day after parturition). The symptoms now observed are great prostration of strength, laborious respiration, with pain at the bottom of the sternum, and frequent hacking cough: pulse 135, and extremely feeble; skin hot and dry; the lips parched; and teeth covered with brown sordes; tongue of a deep red at the edges, dry, chapped, and covered with a yellow fur in the centre. Occasional retching and vomiting; bowels confined; lochia suppressed. The abdomen is perfectly soft and natural, but feels generally sore on being pressed. She complains of acute lancinating pain in the vertex, and of pain and loss of power to move the left inferior extremity.

"On examining the limb, there are several hard lumpy cords found running up on the inside of the thigh, in the direction of the superficial veins, which are very painful to the touch. The integuments over these are not discoloured.

"The middle finger of the left hand is also exquisitely painful, and on examination, is perceived to be much swollen around the second joint, where the integuments are of a dusky red colour.

"7th. She has been delirious in the night, and is now incoherent, with a peculiar wildness of expression in the countenance. The general debility has greatly increased; the respiration is still more hurried; and the pulse is 140, soft and compressible; the tongue is brown and dry; the muscles of the face and extremities are affected with tremors; the whole surface of the body covered with a yellow suffusion.

"8th. She is in all respects worse; there has been violent delirium during the night; and she is now roused with difficulty. The respiration is still more oppressed, and the pulse so rapid and feeble as not to be counted. The countenance dejected and deeply suffused, as is the whole surface of the body. The swelling in the joint of the finger has increased, and another painful diffused swelling along the fore-arm has occured in the night, with slight discoloration. The whole of the right superior extremity has also become stiff, and so painful, that attempts to move it produce violent pain. The swelling and hardness in the course of superficial veins of the thigh are diminished.

"9th. Complete collapse took place and she sunk in the course of the afternoon. On the tenth I opened the body, with Mr. Prout of Welbeck-street, who occasionally saw her with me during the progress of the disease.

"*Dissection.*—The intestines were distended with gas; their peritoneal coat had every where a healthy appearance, except a small portion covering the ileum, which was of a bright red colour, though it was not sensibly thickened. The lower part of the omentum, and portions of the mesentery and mesocolon, were also more vascular than usual, but no lymph was effused in these situations. The mucous membrane of the stomach, small and great intestines, was remarkably pale and bloodless. The left Fallopian tube, and fundus of the uterus, was of a deep red colour, but the sinuses of the uterus, and its muscular coat, were quite healthy. Permission was not obtained to examine the head, chest, or extremities." 423.

In another case related by Dr. Lee, the patient had suffered, during the latter months of gestation, from œdema and a varicose state of the veins of the lower extremities. Two days after her confinement she began to complain of pain in the superficial veins of both legs, and during the subsequent week, a diffuse swelling and erysipelatous redness of the surface took place in the calf of the left leg, and, to a less extent, in that of the right. The usual constitutional disturbance from phlebitis ensued, and on the seventh day, the veins being laid open in two places, a considerable quantity of purulent fluid was discharged. Two abscesses formed above the left ankle and were opened, and a small abscess also formed above the right knee. The patient sank and died on the 14th day from the commencement of the symptoms.

On dissection:—The cellular membrane of the extremity swollen and infiltrated with red-coloured serous fluid—several abscesses beneath the skin in the calf of the leg, and an extensive collection of purulent fluid in the interstices of the gastrocnemii muscles. The branches of the saphena converted into impervious cords, the saphena itself lined with adventitious membrane, the coats of the femoral vein, between the opening of the saphena and the ham, thickened and corrugated, the femoral, above the junction of the saphena, and the external iliac, thickened, contracted in diameter, and lined with a thin coating of lymph.

Here there was inflammation of the veins of the extremity in abundance, but no phlegmasia dolens. Our author likewise gives the case of a lady who had suffered for some time from cancer of the os uteri, and was suddenly seized with vomiting, diarrhœa, and severe pain of the uterus. She lived from the 9th of May, when she was attacked, to the latter end of June, when she died and was examined by Mr. Griffith, of Tottingham Court Road. *On dissection*, the uterus was found to be partly destroyed by cancerous ulceration, and the uterine branches of the left hypogastric vein, the left spermatic, and the veins running along the side of the body of the uterus were found more or less plugged up and lined with lymph.

Some other cases of a similar kind are related by our author, and the paper terminates with an appendix, consisting of a case from Mr. Cæsar Hawkins, and one from Mr. Copland Hutchinson. The former is curious, from the absorbents and receptaculum chyli, not the veins, being filled with pus. The patient had been brought to bed in St. George's Hospital, and was attacked, two days after delivery, with symptoms of puerperal peritonitis of a low character, of which she died in two days more.

Here our analysis of Dr. Lee's memoir terminates, and comment would be superfluous after what we have already said. We regret that our narrow limits have prevented us from indulging in some remarks that we could have wished to offer, and prevented our entering on some questions that we could have wished to discuss. Regrets, however, on this occasion are unavailing, and a future opportunity may perhaps leave us nothing to deplore. We can only say that we have derived much instruction from the perusal of Dr. Lee's memoir, and we recommend every member of the profession, whether engaged in the accoucheur department or not, to weigh attentively the valuable facts it contains. We part from the Doctor with many thanks.

XI.

Drs. Smith and Tweedie on Fever.

[Concluded from page 361 of this number.]

We have dedicated so much space to Dr. Smith's work, in our first article, that we must be brief with him in this. The causes and the treatment of fever remain to be noticed. The immediate or exciting cause, in Dr. Smith's opinion, is a poison formed by the corruption or decomposition of organic matter, vegetable or animal, or both. What this poison is we know not—except that we see it has the power of striking the human being with sickness or death. Of the conditions essential to the putrefactive, or rather febrific, process, heat and moisture are the most certain and perhaps the most powerful. Our author does not appear to be among those who exclude animal matters from the generation of febrific miasms.

"Without doubt, a febrile poison, purely of animal origin, in a high degree of concentration, would kill instantaneously; and when not intense enough to strike with instantaneous death, it would produce a continued fever with the typhoid characters, in the greatest possible degree of completeness and perfection. And this appears to afford the true solution of the origin of the plague. The more closely the localities are examined of every situation in which the plague prevails, the more abundant the sources of putrefying animal matter will appear, and the more manifest it will become, not only that such matter must be present, but that it must abound." 360.

This declaration is followed by an attempt to show the reason why Grand Cairo is "the birth-place and cradle of the plague." The crowded state of the population—their poverty and nastiness—the narrowness of the streets—the heat of the climate at certain seasons—the filth of the canals, &c. are all arrayed as sufficient causes of the plague. Had Dr. Smith travelled as much as he has read or thought, he would probably have been less positive in his conclusions. The town, or rather the capital of Sion, in the valley of the Rhone, at certain seasons of the year—and so, also, the Jews' quarter on the banks of the Tiber, in Rome, present all the above requisites in a very extraordinary degree—and yet without plague. In the former locality, indeed, we have goitre and cretinism—but, in the latter, we see even less of the common malaria fever than in the fashionable Piazza del Popolo, the Place d'Espagne, or the line of the Pincian and Quirinal hills. It will be evident, however, from the following quotation, that our intelligent author considers the war which has been maintained so long between the *contagionists* and *infectionists* as one merely of words.

"But by far the most potent febrile poison, derived from an animal origin, is that which is formed by exhalations given off from the living bodies of those who are affected with fever, especially when such exhalations are pent up in a close and confined apartment. The room of a fever patient, in a small and heated apartment in London, with no perflation of fresh air, is perfectly analogous to a stagnant pool in Ethiopia, full of the bodies of dead locusts. The poison generated in both cases is the same; the difference is merely in the degree of its potency. Nature, with her burning sun, her stilled and pent-up wind, her stagnant and teeming marsh, manufactures plague on a large and fearful scale; poverty

in her hut, covered with her rags, surrounded with her filth, striving with all her might to keep out the pure air and to increase the heat, imitates nature but too successfully; the process and the product are the same, the only difference is in the magnitude of the result. Penury and ignorance can thus at any time, and in any place, create a mortal plague. And of this no one has ever doubted. Of the power of the living body, even when in sound health, much more when in disease, and above all, when that disease is fever, to produce a poison capable of generating fever, no one disputes, and the fact has never been called in question. Thus far the agreement among all medical men, of all sects and of all ages, is perfect.

"But it happens that there is another form of animal matter capable of producing fever: namely, a matter secreted by the living body, constituting not only a poison, but a peculiar and specific poison. This specific poison produces not merely fever, but fever with a specific train of symptoms. In the acknowledgement of this fact, also, the agreement among all medical men is equally perfect.

"But some contend that the poison generated in the first case, and that generated in the second, may both be properly called contagious: others maintain that the application of the same term to two cases so specifically different, destroys a distinction which it is useful to preserve, and that it would be more correct, as well as more conducive to clearness of conception, to call the poison generated in the first case an infection, and to restrict the term contagion, to designate the poison generated in the latter. Vast and immeasurable as the difference appears to be between the contagionists and anti-contagionists, if regard be had merely to their language, yet if attention be paid only to their ideas, to this, and to this only, narrow as the compass is, the whole controversy is reduced. It resolves itself wholly into the question, whether one word shall be used to express two cases which differ from each other in some important circumstances, or whether it may not be more convenient to employ two terms, and strictly to appropriate each to designate its own specific class. It must be manifest that, since both sects are perfectly agreed about the facts, the dispute can be only verbal. If the one would consent to restrict their use of the term contagious, for which there is the best authority and ancient custom, to those diseases which arise from a specific contagion, and would call those which arise from every other poison infectious, there would be an end to this apparently interminable, and in many respects mischievous, controversy." 366.

Of the remote or predisposing causes of fever we need say nothing here—Dr. S. has not attempted to add to our stock of knowledge on this point.

The treatment of fever now only remains to be noticed, and the reader will have pretty well anticipated the principles which Dr. S. is inclined to maintain. The first indication of disorder, he observes, is shewn in the nervous system—it may, he says, possibly be the commencement of inflammation, modified by the nature of the nervous substance, or the peculiar poison exciting the disorder—or it may be "something distinct from inflammation, but having a peculiar tendency to excite it." "In either case (he remarks) the inflammation that is present in fever is peculiar and specific, differing *essentially* from ordinary or simple inflammation." The practical result from this is, that the difference between fever and inflammation is such as requires "a very considerable modification in the treatment appropriate to each." The following proposition is somewhat alarming.

"The only morbid condition of fever, of which we have any knowledge and over which the medical art has any control, is that of inflammation." 376.

Again, he says that although this inflammation be not the primary affection, in the order of events, it is the primary affection in the order of

treatment—"if it be not the sole affection that admits of treatment." Still more, he adds, "the remedies proper for febrile inflammation do not differ from those which are adapted to ordinary inflammation—but they differ materially in the mode in which they ought to be applied, and the extent to which they ought to be carried." This, however, is running the parallel between fever and inflammation pretty close—perhaps rather too close for practitioners in general. For if the only difference of treatment consists in certain undefinable modes or proportions of the same remedies in both cases, it is clear that there will be no discrimination at all, in the great majority of cases. We find Dr. Smith opposed to the fashionable doctrine of the surgical part of the profession, who are mostly conversant with symptomatic fever, namely, that a fever may be "put out," as we would put out a fire by a bucket of water, or extinguish a taper by the cone or snuffers. "It is in vain, says he, to hope to terminate fever by a stroke of art." The search after such a remedy is like the pursuit of the philosopher's stone—with this addition, that the physician will often lose his patient during the experiment.

"Fever cannot be cured instantaneously: it may be moderated; it may be gradually subdued; from being violent and dangerous, it may be rendered mild and safe: the physician may bring it to this condition; and this is all that he can accomplish." 377.

Considering the various forms or types of fever, as differing only in degree of intensity, Dr. S. finds it necessary only to state, first of all, the remedies which are appropriate to the disease, and, secondly, the modification of these in the different degrees of intensity. In the first place, he observes, the common continued fevers of this country require little or no treatment. There is no affection of any organ intense enough to need the application of a powerful remedy. The derangement of function is so slight that a spontaneous cure takes place in the course of a few days. Confinement to bed—the abstraction of stimuli—low diet—gentle aperients, repeated according to circumstances, constitute the whole methodus medendi.

But when fever surpasses this mild form it becomes a serious disease. Out of the hundred cases which Dr. S. has detailed, beginning slightly or commencing furiously, take any one or any number, he remarks, and see what is found after death.

"Inflammation, in general, rising in degree, and increasing in extent, or both, in proportion to the intensity of the febrile affection. If this, which may be justly considered as the law of the disease, be not absolutely constant and uniform, it may be safely affirmed, at least, that there are as few apparent exceptions to it, as to any general law that can be named." 379.

The object in practice, then, is clear—to prevent inflammation, or, if that cannot be done, to control or remove it. Accomplish this, he observes, and the fever will not be cured at once—it will go on for some time—but it will come sooner to a close, and proceed mildly to a safe termination. Fail to accomplish this, and the fever will go on from bad to worse—even to the destruction of some organ or organs by the process of inflammation.

Bleeding in fever, he avers, cannot be too soon performed. "The very first moment of excitement, could that be discovered, is precisely the moment

when the employment of this powerful remedy would produce the greatest effect. The earlier the bleeding, the greater will be the impression made upon the disease, and the less upon the patient—the more effectually will the inflammatory action be stopped by the smallest quantity of blood." When inflammation has actually commenced, there is then not a moment to be lost. The inflammation must be stopped—until we do this we do nothing. To effect this reduction of inflammatory action, blood, in greater or lesser quantities, must be drawn. If this golden opportunity be lost, the disease becomes the master of the physician, and, from that moment, he loses control over the malady. A due impression being made on the inflammation by bleeding, the subsequent treatment should consist of purgatives, given to the extent of procuring three or four motions daily---the best purgative being calomel and rhubarb, repeated every night or every second night, followed in the morning by castor oil or the senna draught. Cold sponging of the skin, if hot, acidulated drink, perfect quietude, a dark room, a silent nurse, (if such can be found) and three tea-cupfuls of arrow-root or gruel in the 24 hours---these comprise all else that will be required, or that will be useful, until the period of convalescence.* Such is the simple but most efficient treatment appropriate to the common fever of London and its neighbourhood, (and the author does not speak of fevers which he has not seen,) in its ordinary degree of severity. Far as we have carried this analysis, we must make room for one more extract, detailing some particulars of the case of the highly-gifted house-physician of the Fever Hospital---Dr. Dill. We shall make a remark or two after the reader has carefully perused the extract.

"But when the attack commences with severe cerebral affection, the bleeding must be proportionally large, and early as it is copious. A bleeding adequate to subdue a moderate, will be utterly inert in a severe degree of cerebral disease. I give, as a specimen of what may be sometimes required, the case of Dr. DILL. I saw my friend at the very commencement of his attack, and was, therefore, able to carry into effect what I conceive to be the proper treatment with due promptitude and vigour. I saw him *before there was any pain in the head, or even in the back, while he was yet only feeble and chilly.* The aspect of his countenance, the state of his pulse, and the answers he returned to two or three questions, satisfied me of the inordinate, I may say the ferocious, attack that was at hand. *Having taken an emetic without delay, as soon as its operation was over, blood was taken from the arm to the extent of twenty ounces.* During the night severe pain in the limbs, especially in the loins, *and intense pain in the head came on.* The blood that was taken on the preceding evening was not inflamed. Early in the morning he was again bled to the extent of about sixteen ounces, with great diminution, but not entire removal of the pain: the pain not lessening, towards the afternoon he was again bled to the same extent: the pain was now quite gone; the blood from both these bleedings was intensely inflamed. During the night the pain

*."It would be trifling, while treating of so momentous a subject as the proper management of fever, which requires the prompt, vigorous, and yet cautious exhibition of the most powerful remedies, to spend any time in discussing the merits of saline, refrigerant, diaphoretic, antimonial medicines, and the rest of the apparatus, which unfortunately continues to hold the place of direct, honourable, and well-earned (if any thing can be well-earned) remuneration to the practitioner." 387.

returned, and in the morning, the eyes were dull and beginning to be suffused, *while the pulse continued slow and intermittent*, and the respiration suspirious; but the face was blanched, *and the pulse, in addition to its other characters, was weak.* Instead of opening the vein afresh, twelve leeches were applied to the temples; these very much relieved, but still did not entirely remove the pain; for this reason he was cupped to the extent *of sixteen ounces;* this operation afforded very great relief, and he continued easy until the following evening, when the pain returned, and he was again cupped on the temples to the same extent. Immediate relief followed this second operation; *but, unfortunately, the pain returned with great violence towards evening, and it was now impossible to carry the bleeding any farther.* Within twenty-four hours, it was plain that typhoid symptoms in abundance would be present, for the fur on the tongue was becoming brown, and there was already slight tremor in the hands. No more blood could be taken with any prospect of advantage, nor even with safety; yet without the aid of some powerful remedy the case was lost.

"The whole scalp was now enveloped in ice, but so intense was the heat of the head that it was melted in a few minutes, and the clothes, steeped in the evaporating lotion, dried with extraordinary rapidity. *Neither of these expedients produced the least perceptible effect.*

"What was to be done? Recourse was had to a measure, the efficacy of which is but little known and less appreciated; a remedy the power of which is second only, if, under some circumstances, it be not even superior, to that of the lancet; a remedy which can never supersede the lancet nor dispense with it, but which, when added to it, forms by the combination a treatment so powerful and efficacious that it might render death, from the acutest cerebral inflammation, as rare as recovery is at present.

"This remedy is known by the name of the cold dash. It consists in pouring a column of cold water upon the head in a continued stream from a height of from six to ten feet The mode of applying it is as follows. The patient is seated in a large tub; a table is placed at the side of the tub upon which a man stands, and at as great an elevation as his arms can reach, pours upon the naked head of the patitent a steady but continued stream of cold or iced water, from a watering-pot without the rose. The stream is made to fall as nearly as possible upon one and the same spot. At first the elevation must be slight, for the shock is too violent if the stream be poured at once from the highest point. There is a record, that in the East, where ingenuity so long laboured for tyranny to invent the most exquisite modes of torment, the victim was placed with his bare head under a small stream of cold water, which was so directed as to fall unceasingly upon one spot. In this instance cruelty was cheated of its object by its ignorance of the mode in which its expedient operated. The device was well adapted to kill, but not to produce pain, for insensibility must soon have put an end to suffering.

"Employed as a remedy, there is no degree of burning heat which the animal economy is capable of producing, no intensity of vascular action, and no violence of pain that can resists its continued application. Sooner or later, usually in from ten to twenty minutes, the heat though most intense, disappears, the skin becomes cold, the face pallid, the features shrunk, while the pulse is reduceed to a mere thread, and the pain of the head, however violent and intolerable, entirely ceases. After the patient has been wiped dry, which he should be as rapidly as possible, and placed in bed, the symptoms may soon return in all their violence; the same process will again remove them, and as often as the former recur the latter must be repeated. Three or four repetitions will commonly suffice to subdue the most intense cerebral affection. In the case of Dr. Dill, the relief it brought was instantaneous and most complete. From a state of intense suffering it rendered him perfectly easy, and from a state of imminent danger, safe. I had no anxiety about him from the moment he came out of his tub, although it was necessary to pass him through the same ordeal three times; but he himself having tried this remedy on his sister, having in

her case witnessed its efficacy, and now felt it in his own, was extremely desirous that it should be repeated as soon as he was conscious of any return of pain. In consequence of this application, together with the copious depletion that preceded it, at the period when under ordinary treatment, the most exquisite typhoid symptoms would have been present, he was convalescent.* If we consider how powerful the abstraction of caloric must be by every fresh current of water that falls upon the head, to what a mere thread the minute external bloodvessels must be constringed, and consequently to what an extent the internal must be affected, we shall not wonder at its efficacy. Powerful as the cold affusion is when exhibited in its ordinary mode, yet the impression it makes upon the brain compared with the effect produced by this remedy, may be said to be what the application of the six leeches to the temples is to the abstraction of thirty ounces of blood." 403.

Over the mind of the experienced practitioner some doubts, as to the necessity of such vigorous measures, in Dr. Dill's case, will probably have flashed. We have taken the liberty of marking some passages in *Italics, in* order to draw the reader's attention more specifically to certain points. Knowing the difficulty of conveying in words, the indications for particular treatment, which are readily recognized by the practised eye of the physician, we should not have noticed this case, but given Dr. Smith full credit for having saved the life of his friend. But having seen Dr. Gill in the midst of this active discipline, when the pulse was slow and intermitting—the respiration suspirious—the face like alabaster—the tongue moist and pale—the skin cold and clammy—we did form an opinion on the case—and that opinion certainly was not in favour of farther depletion. We conceive that Dr. Smith must be endowed with powers of discrimination beyond the usual level of mankind, to foresee the "ferocious attack that was at hand," and that before there was any head-ach, back-ach—nay, when the patient was yet "feeble and chilly." The abstraction of blood in all possible ways, under such circumstances, appears to us now, as it did at the time, a very hazardous experiment, and such as we certainly would not either practise on others, or very cheerfully submit to on ourselves. Dr. Smith may fairly urge his situation of physician to a large fever-hospital, as giving him a preponderating superiority over a physician in private practice—and we grant him all the advantages flowing from such an enviable field for observation. But we may submit that our opportunities of seeing fevers in all their varied forms, in this and in other countries, have not been very limited—nor have we studied their phenomena with a prejudiced eye. We leave the case entirely to the mature reflexions of our brethren, with this one remark, that in this individual instance, Dr, Smith appears to us to have somewhat exceeded the admirable and salutary code of instructions every where conspicuous in the work itself.

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* "Watchful of the convalescence as experience had taught us it is necessary to be after so severe an attack, still he was allowed to put himself too forward. When to all appearances recovered, though still weak, he undertook a journey of fifty miles, that he might the more completely re-establish his health in the country. He had not arrived at his journey's end an hour before he relapsed. He was again bled, and the cold dash was applied a second time with success. From the commencement to the termination of the disease, 120 pounds (!! surely a mistake) of blood were abstracted in this case."

We have dedicated so much space to Dr. Smith's work that we are unable to notice his chapter on scarlatina, which otherwise might have drawn forth a remark or two. He seems to amalgamate the disease rather too closely with common fever, and thinks its modification arises merely from "its complication with an inflammatory condition of the external and internal skin." He makes no allusion to its cause as a specific contagion, and we apprehend that the treatment recommended will be found rather too active.

Here we must conclude. We shall not wind up with any laboured opinion on Dr. Smith's Treatise, which like the charge of the judge, on many occasions only tends to bewilder the jury. But this we will say, that the work just analyzed is the best that we have ever perused, on the subject of fever—and, in our conscience, we believe it the best that ever flowed from the pen of physician in any age or any country. The language is uncommonly elegant—perhaps too metaphorical in some places,—but always perspicuous, and, in the highest degree, illustrative of the ideas and precepts which are meant to be conveyed. The work will establish, on the firmest basis, the talents, the erudition, and the judgment of the author, for ages yet to come.

We must now direct some attention to Dr. Tweedie's volume of Clinical Illustrations, in which he has confined himself as much as possible to a detail of facts, and rarely indulges in theoretical discussions. The work is divided into nine short chapters, the first being merely some preliminary observations. In these observations we are glad to see a striking coincidence of opinion respecting the nature of fever, between the two officers of the same institution.

"In every case of genuine fever, there is not one, but several organs affected; the affection in the first instance at least, is functional, however soon this functional disturbance may pass into vascular excitement, and afterwards into inflammation.

"Every one who has attentively studied the order of invasion of the symptoms, and more particularly those who have had personal experience of fever, must be satisfied that the brain and nervous system are early and primarily engaged in the febrile action; the disturbance in the brain is, in the beginning, simply functional, though it may, sooner or later, according to particular circumstances, assume an inflammatory character.

"The circulation next partakes in the disorder; there is generally, though not invariably, quick pulse and heat of skin, to which, as a consequence of the previous condition of the sensorium, succeeds a vitiated state of the secretions. Hence the furred tongue, thirst, depraved taste, and turbid urine, observed in fever.

"It is evident, that in this state of febrile excitement, to which the term simple fever may with strict propriety be applied, there is no preponderance of action in any organ; all parts of the system partake equally in the general disturbance. This may continue for an uncertain period, probably for a few days, when it is either brought to a termination by proper measures, or subsides spontaneously.

"When once the torch is lighted, when the circulation is quickened, and the blood consequently impelled with great velocity through organs whose functions are already disordered, the transition from excitement to inflammation is often rapid. When there is a predisposition to disease in any part, the febrile action is most likely to prey on the organ so predisposed, and the period of the fever at which the inflammation comes on, as well as its in-

tensity, will depend on a variety of concurrent circumstances in each individual case. "In one instance, we shall find the local affection in the brain; in a second, in the organs of respiration; in a third, in some of the abdominal vicera, most frequently in typhus fever, in the mucus membrane of the intestines; and it not unfrequently happens that more than one of those organs is simultaneously inflamed." 7.

Dr. Tweedie remarks, that this supervening inflammation is of a less intense kind than that of the ordinary phlegmasiæ—though he is unable to account for this modification. The following passage is deserving of notice.

"He who treats complicated fever with the same activity as he would treat any of the phlegmasiæ, is utterly ignorant of one of the most important principles on which the treatment should be conducted." And again, he observes:—

"Fever is not inflammation,—it is, therefore, not cured by remedies that effectually remove the latter, though its violence may be mitigated, and its duration shortened, by the judicious, modified application of the same measures." 8.

This, we conceive, is more judicious advice to the multitude than that which Dr. Smith has conveyed through the medium both of precept and example. Dr. T. looks upon fever as "primarily a general disease," which, in the majority of cases, becomes complicated with local inflammation in the progress of the disorder—the danger being in proportion to the severity of the inflammation—the importance of the organ affected—and the nature of the early treatment. Dr. T. does not, therefore, chime in with any of the LOCALISTS who have figured on the stage, of late years, though he grants that their investigations have had a benficial effect in drawing attention to the local affection in fever.

The second chapter of the work gives some account of the Fever Hospital—the tables of admission—and a short statistical account of the fever in London, during the last ten years. Of this chapter we can take but very brief notice. In the years 1826 and 7, the fever cases were not only more numerous, but the fever itself was unusually severe. Upwards of 700 cases were rejected for want of room, in the year 1826. The class of patients in the Fever Hospitals consists chiefly of the servants of subscribers—of the immates of work-houses—artisans—and labourers of various descriptions.

The third chapter gives first, some tabular views of admission, cure, and death for one year, ending the 1st September, 1829. It appears that the admissions during that year were 521, of which 445 were cured—3 discharged into the Small-pox Hospital—and 73 died. From the tables furnished in this chapter it seems, that the period of life most liable to fever, is from 15 to 20 years—next, from 20 to 25—the susceptibility to the disease decreasing as life advances.

Dr. Tweedie classes fever in three divisions, the continued—the periodical—and the exanthemata. These are, of course, subdivied into species and varieties—as, for example, the continued fever, is subdivided into simple, complicated, and typhus. He confines his observations to continued fevers, as those are the forms chiefly admitted into the hospital.

Of simple fever he is convinced that he daily sees examples where there

is no evidence of local inflammation—where there is no preponderance of action in any particular organ. Yet, considering how disease creeps on without much external warning in the vital organs, he wisely advises us to watch narrowly for a focus of irritation or inflammation.

In complicated fever, he observes, the local disturbance may be in the head, the chest, or the abdomen—such disturbance constituting the chief source of danger. By typhus fever Dr. Tweedie merely wishes to denote the more severe forms, in which, from the commencement, there is more considerable disturbance in the brain and nervous system—great prostration of strength—with affection of the mucous membranes, &c. He agrees with Dr. Smith, and various other authors, in considering that the primary action of the various exciting causes of fever, is on the brain and nervous system—inflammation being a secondary consequence, and not always taking place at all. In 37 cases out of 54 that were examined after death, the brain shewed evident marks of previous inflammation. In 14 of the fatal cases, "there were no traces of any disease in the brain or its membranes." In these there was destructive inflammation of other organs.

"From this account, we have evidence that the brain and nervous system is very generally, if not universally, involved in the febrile action. This condition of the brain, however, is not to be regarded as the primary cause, but one of the secondary effects of fever. The principle I have so often adverted to, it is important to bear in mind—that the brain being so frequently implicated in fever, the most vigilant measures should be at once adopted, on the very first warning of the approach of inflammation, to prevent those changes of structure which so speedily take place, and render the situation of the patient almost hopeless." 29.

The cerebral affection may be so severe as to be the sole cause of death. It is, however, rarely so. In four cases only was the cerebral disorder so violent as to prove the immediate cause of death. It was only, when the cases were admitted in the early stages, that free depletion was resorted to:—when the symptoms had existed so long as to render vigorous measures doubtful, small local bleedings, blisters, and cold lotions, were employed. Such cases required great discrimination, in subduing the low degree of cerebral inflammation, on the one hand, and husbanding the powers of Nature, on the other. Dr. T. particularly invites his brethren to the observation of a phenomenon which he has often remarked—the masking of the symptoms of other inflamed organs by the cerebral affection. Thus, inflammation of the chest may be entirely overlooked, since, in the absence of cough or difficulty of respiration, there is nothing to lead even to the suspicion of mischief in that quarter. Hence the utility of the stethoscope in such obscure and uncertain cases. Dr. T. has been surprised not to meet with more instances of paralysis, considering the frequency of cerebral inflammation. He only saw one case of it—and that in a man who suddenly lost the use of the right arm, after the more urgent symptoms in the brain had disappeared. He gradually recovered. Retention of urine, however, may be considered as a partial paralysis in this disease, and is by no means infrequent.

"*Affections of the organs of respiration in fever.* Inflammatory affections of the lungs constitute a very common, as well as severe form of complicated fever. This appears from

the number of cases in which the pulmonary symptoms were observed, and from which the principal source of danger arose.

"In 103 cases, the lungs were more or less severely affected, of whom about one-third died, which shows the extreme severity of this form of complication.

"In the four months of October, November, December, and January, acute affections of the lungs were very prevalent. Of 187 patients admitted in these months, 61 had some form of chest affection, of whom 53 were bled generally; the average quantity of blood taken from each being about 14 ounces.

"In the spring months the symptoms in the chest were less frequent; but it was observed, that in May, which was unusually cold, pulmonary affections again prevailed; of 56 cases admitted in the course of this month, 14 had severe symptoms of inflammation in the chest." 34.

Since Dr. T.'s appointment to the Fever Hospital, he has seen four individuals die of cynanche laryngea—two of them convalescent from scarlatina. From what he has observed in such cases, he is satisfied that, when the larynx is attacked with acute inflammation (which generally terminates rapidly in œdema of the glottis) the only chance of saving the patient's life, is by the operation of tracheotomy. The operation, we have no doubt, would have saved life in the following case.

"A girl, 13 years of age, after a smart attack of scarlet fever, in which the inflammation in the throat had been very severe, was suddenly seized with symptoms of laryngitis; the breathing was very laborious, and attended with stridulous noise, and frequent attempts to cough, which effort produced the most intense distress. Her deglutition was exceedingly painful, so that she dreaded every attempt to swallow even a little food. The uvula and tonsils were red, but not much swollen; the pulse 140; the skin cool. Leeches had been applied to the throat before I visited her, but with very little relief.

"I proposed that an opening should be made into the windpipe, but this was objected to. Blood was therefore directed to be taken from the arm; a blister to be applied to the throat; and doses of calomel to be taken at intervals. She died, however, eight hours after I saw her, having derived only temporary benefit from those measures.

"On examination of the body, the tonsils were swollen, and from the enlarged mucous ducts a small quantity of bloody puriform fluid escaped; the mucous membrane covering the epiglottis, and the upper portion of the membrane of the larynx, were inflamed and œdematous; but the inflammation not having extended below the rima glottidis, this portion of the tube retained its pale healthy appearance; the parotid, sublingual, and submaxillary glands were enlarged.

"This case affords an instructive lesson; the blood-letting, and other measures evidently hastened the death of the child; and from the healthy condition of the organs below the seat of disease, it is probable that the operation would have saved her life." 37.

Our intelligent author makes some very judicious observations on bronchitis, as an accompaniment of fever. Where patients have suffered previously from what is termed Winter-cough, the case is rendered much more formidable. There is imperfect arterialization of the blood, known by blue colour of the lips, dusky leaden hue of the face and upper extremities, while the functions of the brain become more or less embarrassed, according to the severity of the bronchial affection. The patient becomes delirious—then insensible—the pulse soft and feeble—the tongue covered with deep brown or black crust—while the temperature of the surface falls below par.

True Pneumonia occurred in a considerable number of cases, and required the free use of the lancet.

"The remedy, however, in which I place most confidence, in inflammation of the lungs, but more particularly in bronchitis, either as an auxiliary to bleeding, or when this operation was not justifiable, from the length of time the local symptoms had existed, was the tartar emetic, in doses of one or two grains every second, third, or fourth hour, according to circumstances.

"In general it produced severe vomiting at first, the violence of which was very often lessoned by the addition of a few drops of laudanum to each draught; but when the *tolerance* was established, it was most satisfactory to witness the gradual decline of the more urgent symptoms in the chest, and the conviction in the mind of the patient, though much suffering had been endured from the vomiting, when the medicine was first administered, that their amendment was to be ascribed to the remedy." 43.

In a number of instances the inflammation of the chest had been entirely overlooked by the attendant practitioners before the patients entered the hospital—while in others, it assumed a slow insidious form, without any well-marked symptoms, except a little acceleration of breathing, and slight increase of the fever. "The application of the stethoscope is, in such cases, the only sure method of detecting the state of the lungs; and under such circumstances, its utility is unquestionable."

Of 523 cases included in this report, 71 had prominent symptoms of abdominal inflammation. Dr. T. conceives, that the morbid condition of the intestinal mucous membrane is one of the *specific effects* of typhus. Of this more anon.

In a large proportion of cases examined after death, a remarkable softness of the spleen was observed, accompanied by a considerable enlargement of the organ. The function of the spleen, however, being unknown, it is useless to draw any conclusions respecting its disorders in fever.

The fourth chapter of the work is on typhus, simple and complicated.

"I should be inclined to include under this term only, those fevers in which the brain and nervous system are early and severely affected, accompanied with symptoms denoting a morbid condition of the mucous membrane and skin, and a tendency to what is known by the term putrescency. This tendency is indicated by the condition of the blood, especially in the advanced stages. The crassamentum of which, instead of forming a firm coagulum, is loose, small in proportion to the quantity of serum, and so soft that it breaks readily on attempting to raise it, resembling in consistence, half-boiled currant jelly. In some instances, I have observed, that when blood has been abstracted late in the disease, it scarcely coagulated at all.*

"Not only is the condition of the blood changed in typhus fever, but as a consequence of this morbid state of the blood, the secretions are more or less vitiated. Hence the clammy, disagreeable condition of the mouth—the depraved taste—the dry sordes on the teeth and lips—the brown or black incrustation of the tongue—the peculiar smell from the body, which is easily recognized by those who have much experience in fever, while the excretions are much more fetid than in any other disease of a febrile nature.

"These morbid changes are evidently produced by the action of the febrific poison on the brain and nervous system, and not by its primary operation on the fluids; in this view

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* "See the Lecture of Dr. Clanny, of Sunderland, containing an account of some interesting experiments on the blood in fever."

alone are the principles of the humoral pathology at all applicable to the phenomena of fever in general." 51.

Simple typhus is considered by our author, as corresponding with the adynamic fever of Pinel and others, being a disorder of function only. It is not often met with in this country; and here Dr. T. enters his protest against the conclusion to which Dr. Burne has come, that this simple typhus is the general character of the continued fever of London. Dr. Burne's description, he avers, only applies to one form of fever in this metropolis.

Dr. T. next adverts to typhus, as complicated with affections of the brain, lungs and intestines. The latter organs are, he thinks, much more frequently affected in France than in England—though by no means rarely so, even here. Thus in 54 cases of this fever, there were eight in which inflammation of the mucous membrane was present—sixteen with inflammation and ulceretion—in all, 24 out of 54. It is unfortunate, he observes, that we have no diagnostic signs to indicate the existence of gastro-enteritis in fever. We shall often be deceived if we trust to the colour or condition of the tongue.

"I have occasionally been surprised at the precision with which some physicians have spoken of its existence from the red colour of the tongue alone. That this condition of the tongue has been often remarked in cases in which this membrane has been found inflamed after death, accords with my own experience, as well as that of the best informed writers; but on the other hand, I must state, that I have met with this vermilion colour when no such morbid appearance was discovered after death. In fact I am disposed to believe that, in many instances, the injection of the tongue is entirely a local affection, and not at all a certain index of the existence of gastro-enteritis." 59.

The general absence of pain is another circumstance deserving of notice. It is not, indeed, to be expected, that the mucous membrane will exhibit much pain, in slow inflammation, when pressure is so difficult of application. It is curious that diarrhœa is far from being a constant attendant of this muco-enteritis, though it might naturally be expected. When the mucous membrane of the colon, however, is inflamed, the symptoms assume the dysenteric character—the discharges being frequent, small, and bloody, accompanied with pain. After death, indeed, the signs of gastro-enteritis are unequivocal enough. The usual phenomena of inflammation, and even of ulceration, are sufficiently apparent. On this important sequela, or accompaniment of fever, Dr. Tweedie has favoured his brethren with very many interesting remarks and observations. We must pass over Dr. T.'s notices of petechiæ, erysipelas, gangrene, in order to dedicate more space to the fifth chapter, on the CAUSES OF FEVER.

It was not difficult, our author states, to trace the cause of fever, in many patients who entered the hospital, to cold, intemperence, fatigue, &c. but, as a great number came from certain districts of the metropolis, which are seldom exempt from visitations of fever, it is to be presumed that some local cause existed in such situations. Scarcity of food has long been known to predispose strongly to the operation of other febrific causes; and it is not a little curious---

"That though almost every description of mechanics has been, at some period or other, admitted last year into the Fever Hospital, I do not recollect a single instance of a butcher being sent into the establishment. The exemption of this class of people from the plague,

when it last visited London, is mentioned by those writers who described this pestilence; and this immunity goes far to prove, that famine is a powerful predisposing cause." 79.

Atmospheric influence is next taken up by Dr. Tweedie, but this occult cause is likely to remain in obscurity for ages yet to come. A local impure atmosphere, however, is more easily understood. Whenever men are crowded, whether in health or disease, a contaminated atmosphere is generated, and fever results from breathing this air.

The hitherto inexplicable terrestrial poison, malaria, next engages Dr. Tweedie's attention, but he cannot be expected to throw any new light on this abstruse subject. He thinks it is to be regretted that this invisible agent should have been too indiscriminately brought forward to explain the origin of fever in this country.

"It has been a most fortunate loop-hole for some who affect to disbelieve the doctrine of contagion, as one of the many sources of fever. I have been told, that the existence of malaria can be pointed out in particular streets, and in particular houses, which from their situation, ventilation, and construction as to drainage, render such a supposed cause of fever extremely improbable. I have known individuals, on whom such an assumed cause of the disease has had such an impression, that they have absolutely thrown up their houses, and retired from London." 85.

Dr. Tweedie believes in contagion—to which belief he is irresistibly led by the evidence of his own senses. Contagion, however, is only one of the causes of fever, and has, till lately, been too exclusively looked to as the principal cause.

"I have no hesitation, after an impartial inquiry into the subject, and ample means of investigation, to affirm my decided conviction, that fever will spread by contagion; but that the probability of its extension depends very much on cleanliness, the proper ventilation of the sick chamber, and the purity of the surrounding atmosphere." 86.

Dr. T. believes that the contagious principle may be so diluted by pure air, as to be entirely innocuous, just as a mineral acid may, by dilution, be deprived of its caustic qualities. The arguments in favour of contagion may be overstrained by looking to the number of people who are successively or simultaneously attacked by fever. Such occurrences may be explained on the principle that all those who have been attacked, were exposed to the same exciting cause. The following observations bear on the question of contagion.

"The London Fever Hospital is placed in an open space, situate in the vicinity of the metropolis, close to the Small-Pox Hospital. Both these establishments stand in the centre of a large field, where the production of malaria is extremely improbable. I can state, from the most authentic sources, that every physician, with one exception, (the late Dr. Bateman,) who has been connected with the Fever Hospital, has been attacked with fever during his attendance, and that three out of eight physicians have died.

"The resident medical officers, matrons, porters, laundresses, and domestic servants not connected with the wards, and every female who has ever performed the duties of a nurse, have one and all invariably been the subjects of fever; and to show that the disease may be engendered by fomites in clothing, the laundresses, whose duty it is to wash the patients' clothes, are so invariably and frequently attacked with fever, that few women will undertake this loathsome, and frequently disgusting duty." 38.

We have reason to believe that Dr. Bateman himself suffered from the fever, and recorded the fact in one of the fever articles written by him in Rees's Cyclopœdia. During Dr. Dill's absence last summer, in consequence of illness, it was necessary to appoint some person to officiate for him. The first who took up the office, took the precaution of sleeping out of the hospital at night—nevertheless he was attacked with the fever. The duty was then undertaken by a medical pupil, who had completed his education, and was in robust health. He was a stanch non-contagionist, and ridiculed the idea of personal danger from residence in the hospital.

"He performed the duty of house surgeon for ten days only, when symptoms of a severe fever appeared. Unwilling to believe that he had caught the disease, he ascribed his illness to the effects of common cold, till the febrile prostration, and severe determination to the head, obliged him to resign his duties. He was, within 24 hours, seized with most severe symptoms of cerebral fever, which required the abstraction of nearly 100 ounces of blood, before they were subdued. He passed through a most dangerous attack of fever, and remained in the hospital five weeks, before he could with safety be removed; though I fear this almost fatal personal illustration has not convinced him of the contagious nature of fever." 89.

It has been asserted by the non-contagionists that the Fever-Hospital is surrounded by malaria; but unfortunately the Small-pox Hospital, which actually touches the other, has presented no instance of its officers being affected with fever. Cases of fever are very rare among the nurses of general hospitals, where fever, of course, is not concentrated. But it is useless to multiply arguments in favour of the existence of contagion. Those who have made up their minds on the other side of the question will not listen to reason, and those who are unprejudiced need no further proofs.

The 6th chapter is on the mortality of fever. There is great difference in the ratio of mortality, in different years, situations, and epidemics. In the same institution it has sallied from 1 in 4 to 1 in 12, and that under the same physician—the late Dr. Bateman. Of 50 patients received into Guy's Hospital from May 1816 to April 1817, thirteen died—or 1 in 4. But between May 1817 and April 1818, 258 were admitted, of whom only 16 died—or 1 in 15. After this, it is nearly useless to record the comparative mortality in fever, since absolutely nothing can be drawn from such comparison in respect to treatment. Dr. Tweedie has, however, collected, with great care and diligence, a number of authentic returns from different hospitals, shewing the comparative mortality, and to these we refer the curious reader.

In the 7th chapter Dr. Tweedie has detailed the history and reduced to a tabular form the morbid appearances observed in 54 cases which were examined after death. These histories and tables we must pass over; but they present a very valuable mass of facts. They corroborate, in all essential points, the statements of Dr. Smith. In the great majority of cases, there was disease in the head, chest, and abdomen.

The 8th chapter embraces the treatment.

"The principles upon which the cases which form the subject of the present report have been treated, it is almost unnecessary to observe, are founded on the conviction, that fever is an acute disease, whether in its simple or complicated form, and therefore requiring antiphlogistic treatment, modified according to the individual circumstances of each case." 165.

"In no case was bleeding more decidedly beneficial than in severe head-ach, with flushing, restlessness, acute delirium, and watchfulness; it often proved the best means of tranquillizing the patient, and inducing sleep. When, however, the delirium was of the low, muttering kind, without pain of head, or flushing, showing a low form of neglected inflammation of the brain, the stage for active treatment had passed over, and the experience, therefore, of the doubtful advantage, if not positive injury, resulting from the abstraction of blood in such cases, led me to trust to small leechings, cold washes, and blister to the nape.

"The state of oppression and apparent debility induce the practitioner too often in such cases, to prescribe a tonic plan of treatment; but it should be remembered, that the low, depressed condition of the patient, is the effect of inflammation in the brain, or its membranes, which will be inevitably increased by the administration of cordials." 167.

The length to which these two fever articles have run prevent us from indulging in more than one other extract, which, however, will prove a very important document.—(See Table annexed.)

"By this statement it appears that 280 lost blood—146 from the arm, 70 locally, and 64 both generally and locally; the average quantity of blood drawn was about 19 ounces.

"Of the whole number bled (280), there were

	Cases.	Average quantity of blood.
Of Simple Fever	26	8 ounces.
Affection of the brain	110	20
——— chest	81	17
——— abdomen	22	15
——— head and chest	20	21
——— head and abdomen	12	16
——— head, chest, and abdomen	9	24
	280	

"With respect to the period of the fever at which blood-letting was employed, it may be observed, that although it was chiefly adopted in the early stages, still when the symptoms were urgent, it was abstracted even in the more advanced stages; for it frequently happened that in the course of fever, which at the commencement was comparatively mild, visceral inflammation supervened, which could only be arrested by the lancet." 171.

Dr. Tweedie is not an advocate for indiscriminate depletion, whether by the lancet or other means. He lays down admirable rules, as well as cautions and restrictions in the practical application of the various remedial agents. In short, the present work, concise and unostentatious as it is, would have led us to think that Dr. Tweedie was a man of clear judgment, unfettered by attachment to any fashionable hypothesis—that he was an energetic but judicious practitioner—and that, if he did not dazzle his readers with the brilliancy of theoretical speculations, he would command their assent to the solidity of his didactic precepts. Such, we say, would be the deductions from the perusal of the work, uninfluenced, we may safely assert, by a personal knowledge that the character of the AUTHOR, (which is often otherwise) is not depreciated by intimacy of acquaintance with the MAN.

P. S. We regret that we were unable to allot any space for Dr. Tweedie's section on Scarlatina, which contains much useful and practical advice in respect to treatment.

1828 and 1829.	Monthly Admissions.	Numbers bled from the arm.	Number of ounces of blood from the arm.	Number bled locally by cupping or leeches.	No. of ounces of blood locally abstracted, allowing half an ounce taken by each leech.	Numbers bled both generally and locally.	Ounces of blood abstracted. Generally.	Ounces of blood abstracted. Locally.	Monthly Mortality.	Of whom were bled, Generally, Locally, Generally and Locally.
September. . . .	60	29	504	8	90	4	System. . 132	Locally. . 40 } 172	12	Generally . . . . . 3 Locally . . . . . 2 Both 2 7
October	44	13	292	6	61	7	System. . 146	Locally. . 89 } 235	6	Generally . . . . . 2 Locally . . . . . 1 Both 2 5
November . . .	24	5	112	6	37	4	System. . 86	Locally. . 33 } 119	5	Generally . . . . . 1 Locally 2 3
December. . . .	52	9	188	8	43	7	System. . 162	Locally. . 82 } 244	2	Generally . . . . . 1 Locally 1 2
January.	67	10	218	9	46	6	System. . 94	Locally. . 47 } 141	8	Generally . . . . . 1 Both 1 2
February	49	3	28	4	29	5	System. . 132	Locally. . 36 } 168	6	None bled.
March	41	13	252	3	25	2	System. . 22	Locally. . 19 } 41	5	Locally . . . . . 2 Both 1 3
April.	28	3	6	6	28	4	System. . 56	Locally. . 25 } 81	2	Locally 1
May	56	24	559	9	74	5	System. . 112	Locally. . 78 } 190	9	Generally . . . . . 2 Locally 2 4
June.	41	18	316	2	16	8	System. . 175	Locally. . 109 } 284	8	Generally . . . . . 3 Both 1 4
July	36	12	231	4	42	8	System. . 108	Locally. . 64 } 172	7	Generally . . . . . 1 Locally . . . . . 3 Both 1 5
August.	23	7	131	5	35	4	System. . 58	Locally. . 34 } 92	3	Both 1
	521	146	2892	70	526	64	System. . 1283 Locally. . 656 1939		73	Generally . . . . 14 Locally . . . . . 14 Both 9 37

XII.

CONSOLATIONS IN TRAVEL, OR THE LAST DAYS OF A PHILOSOPHER. By *Sir Humphry Davy*, Bart.

THE last days indeed of a philosopher! or rather the termination of a long course of chemical philosophy, in a short but splendid dream of metaphysical abstraction! The extent and versatility of a man's genius can nevcr be known till they are tried. Who would have supposed that a writer to the Signet should be the writer of Marmion---or that a poet should be able to discard his mistresses, the Muses---nay even his fair "Lady of the Lake," and take to writing "Tales of my Landlord"? Sir Humphry Davy has exhibited still greater versatility of talent than Sir Walter Scott, or even Shakespeare. From analyzing salts and metals, he has rushed into the stars and planets, to describe the inhabitants of Jupiter and Saturn! From poring over the crucible in Albemarle Street, he takes a cruise on the back of a comet through unlimited space, descanting on the inhabitants, manners, and customs of the various orbs which he passes on his route, with as much ease as he would have delivered a lecture on the safety-lamp. It has been said of Shakespeare, that he---

"Exhausted worlds and then imagined new"—

but such was not the case. His Ariels and his Calibans were all of this world, whatever diversity of sentiment or action they displayed. But Sir Humphry Davy has far outstripped the bard of Avon, by making us intimately acquainted with beings of other worlds, and regions into which the human mind never before dared to pry. Whether the lamented philosopher will be hailed by the orthodox Christian or the sceptical free-thinker, as supporting one or other of their respective doctrines, we shall not attempt to determine; but we suspect that he is rather too Pythagorean for the divine, and too spiritual for the materialist.

Although the philosophy of other worlds is rather out of our beat; yet the last days and the last lucubrations of such a philosopher as Sir Humphry Davy, must excite some interest in the minds of even the most plodding practitioners in physic, and, therefore, we shall make no apology for introducing to our readers a short account of the very curious production now lying open before us.

It consists of six dialogues, the first being entitled the "VISION." The dialogue opens in the spacious arena of the Colosæum between two English friends, (and the author,) the former a learned but liberal Catholic---the latter a free-thinking Aristocrat. It was not likely that the sentiments of these opposite characters should harmonize long, while remarking on the Pagan and Christian forms of religion. High blood was rising, when the author dismissed his friends, and remained to ruminate within the majestic ruins of Vespasian's amphitheatre. The following passage will make a favourable impression on the reader.

"It was a still and beautiful evening in the end of May; the last sun-beams were dying away in the western sky and the first moon-beams shining in the eastern; the bright orange tints lighted up the ruins, and as it were kindled the snows that still remained on the dis-

tant Appennines, which were visible from the highest accessible part of the amphitheatre. In this glow of colouring, the green of advanced spring softened the gray and yellow tints of the decaying stones, and as the lights gradually became fainter, the masses appeared grander and more gigantic; and when the twilight had entirely disappeared, the contrast of light and shade in the beams of the full moon and beneath a sky of the brightest sapphire, but so highly illuminated that only Jupiter and a few stars of the first magnitude were visible, gave a solemnity and magnificence to the scene which awakened the highest degree of that emotion which is so properly termed the sublime. The beauty and the permanency of the heavens and the principle of conservation belonging to the system of the universe, the works of the Eternal and Divine Architect, were finely opposed to the perishing and degraded works of man in his most active and powerful state. And at this moment so humble appeared to me the condition of the most exalted beings belonging to the earth, so feeble their combinations, so minute the point of space, and so limited the period of time in which they act, that I could hardly avoid comparing the generations of man, and the effects of his genius and power, to the swarms of luceoli or fire-flies which were dancing around me, and that appeared flitting and sparkling amidst the gloom and darkness of the ruins, but which were no longer visible when they rose above the horizon, their feeble light being lost and utterly obscured in the brightness of the moon beams in the heavens." 13.

Left to himself in the Colosæum, and aided by the light of the moon and the solitude of the scene, our author fell into a reverie on the awful vicissitudes that had befallen the once potent city of Rome, concluding that no new empire would ever again rise out of her colossal ruins---that the world itself was now, perhaps, in its zenith---and would soon be in decay. At this moment the philosopher fell into a kind of trance or dream---soft music sounded in his ears---a genius, invisible but audible, spoke in heavenly accents, and, after the usual preliminaries, and with the usual machinery, conducted the favoured dreamer through the air to a spot where a scene opened, and disclosed the original races of created beings. The surface of the earth was covered with forests and marshes---wild animals were grazing in extensive savannahs, while lions, tigers, and other ferocious beasts occasionally disturbed and preyed upon them---naked savages were feeding upon wild fruits, devouring shell-fish, and sometimes fighting with clubs for the remains of a whale. Their habitations were in caves, or under the shelter of the palm tree---and their greatest delicacies were the date and the cocoa-nut, for which they often contended in deadly strife. Some of the savages had weapons, pointed with flint or fish-bones, with which they destroyed other animals for food. The genius, of course, pointed the dreamer's attention to this scene, as that of "man in his newly-created state, full of youth and vigour." He was then hurried away through the air, when scene the second opened on his view. The earth was then partly cultivated and partly wild---men were covered with the skins of beasts---cattle were enclosed in pastures---corn was growing in the fields---cottages appeared in the vallies---and, in short, man was in the agricultural state, the golden age of the poets. Another darkness, and another whirl through the air, disclosed the third scene or act of the visionary drama. Then the philosopher saw extensive cultivated plains, large cities, palaces, forums, temples---groups of men performing military exercises---galleys ploughing the ocean---roads traversed by carriages---in short, a degree of civilization---but the instruments of brass---and poetry only oration. There was as yet, no written language.

In the next scene a great alteration was observable. Instruments of malleable iron were in use—and *thought* was rendered permanent by characters impressed on papyrus. Then it was that small bands of iron-clad men subdued thousands of savages—traversed the seas,—founded colonies—built cities—and carried with them, wherever they went, the arts of civilization. At this time two libraries were filled with rolls of papyrus—the same steel which destroyed armies in the field, struck out forms from the marble rock, "more perfect than those of life"—the walls of palaces and temples were covered with pictures portraying historical events, with the truth of Nature and the poetry of mind—in fact, man had arrived at that state of society which is still an object of admiration to the youth of modern times, and which has left maxims of war, policy, letters, and arts, which yet remain models for imitation.

"I opened my eyes, and recognized the very spot in which I was sitting when the vision commenced. I was on the top of an arcade under a silken canopy, looking down upon the tens of thousands of people, who were crowded in the seats of the Colosæum, ornamented with all the spoils that the wealth of a world can give; I saw in the arena below animals of the most extraordinary kind, and which have rarely been seen living in modern Europe, the giraffe, the zebra, the rhinoceros and the ostrich from the deserts of Africa beyond the Niger, the hippopotamus from the upper Nile, and the royal tiger, and the gnu from the banks of the Ganges. Looking over Rome, which in its majesty of palaces and temples, and in its colossal aqueducts bringing water even from the snows of the distant Appennines, seemed more like the creation of a supernatural power than the work of human hands; looking over Rome to the distant landscape, I saw the whole face as it were of the ancient world adorned with miniature images of this splendid metropolis. Where the Roman conquered, there he civilized; where he carried his arms, there he fixed likewise his household gods; and from the deserts of Arabia to the mountains of Caledonia there appeared but one people, having the same arts, language and letters, all of Grecian origin." 26.

The next view was, of course, Rome in ruins—pillaged by Goths and Vandals—her statues and temples demolished—her warriors sunk in effeminacy and conquered by hordes of barbarians. Once more shifting the scene, he saw Italy recovering from her fallen state—learning stealing from the dusty papers of the monks—and the press invented to render literature and science imperishable for the future. Gunpowder, too, had now changed the face of warfare, substituting skill and ingenuity for personal conflicts and brute force. It is needless to say that astronomy, chemistry, mathematics, machinery, and the wonderful effects of steam and gas, were pointed out by the genius—and that England was seen conspicuous in the van of intellect, art, and science. The following sentiments, from the mouth of the Genius, savour a little of Pythagorean philosophy.

"In comparing the population of the globe as it now is with what it was centuries ago, you would find it considerably greater; and if the quantity of life is increased, the quantity of happiness, particularly that resulting from the exercise of intellectual power, is increased in a still higher ratio. Now you will say, *is mind generated, is spiritual power created;* or, are those results dependent upon the organization of matter, upon new perfections given to the machinery upon which thought and motion depend? 'I proclaim to you,' said the Genius, raising his voice from its low and sweet tone to one of ineffable majesty, 'neither of these opinions is true. Listen, while I reveal to you the mysteries of spiritual natures, but I almost fear that with the mortal veil of your senses surrounding you, these

mysteries can never be made perfectly intelligible to your mind. Spiritual natures are eternal and indivisible, but their modes of being are as infinitely varied as the forms of matter. They have no relation to space, and, in their transitions, no dependence upon time, so that they can pass from one part of the universe to another by laws entirely independent of their motion. The quantity or number of spiritual essences, like the quantity or number of the atoms of the material world, are always the same; but their arrangements, like those of the materials which they are destined to guide or govern, are infinitely diversified; they are, in fact, parts more or less inferior of the infinite mind, and in the planetary systems, to one of which this globe you inhabit belongs, are in a state of probation, continually aiming at, and generally rising to a higher state of existence. Were it permitted me to extend your vision to the fates of individual existences, I could show you the same spirit, which in the form of Socrates developed the foundations of moral and social virtue, in the Czar Peter possessed of supreme power and enjoying exalted felicity in improving a rude people. I could show you the monad or spirit, which with the organs of Newton displayed an intelligence almost above humanity, now in a higher and better state of planetary existence drinking intellectual light from a purer source and approaching nearer to the infinite and divine Mind." 44.

The philosopher now ascends through regions where we dare not follow him—except at a very respectful distance. He passed by the moon and stars so near that he could almost have touched them with his hand—and at length came to the verge of the immense atmosphere of Saturn.

"I saw below me a surface infinitely diversified, something like that of an immense glacier covered with large columnar masses, which appeared as if formed of glass, and from which were suspended rounded forms of various sizes, which, if they had not been transparent, I might have supposed to be fruit. From what appeared to me to be analogous to masses of bright blue ice, streams of the richest tint of rose-colour or purple burst forth and flowed into basins, forming lakes or seas of the same colour. Looking through the atmospherc towards the heaven I saw brilliant opaque clouds of an azure colour that reflected the light of the sun, which had to my eyes an entirely new aspect, and appeared smaller, as if seen though a dense blue mist. I saw moving on the surface below me immense masses, the forms of which I find it impossible to describe; they had systems for locomotion similar to those of the morse or the sea-horse, but I saw with great surprise that they moved from place to place by six extremely thin membranes, which they used as wings. Their colours were varied and beautiful, but principally azure and rose-colour; I saw numerous convolutions of tubes, more analogous to the trunk of the elephant than to any thing else I can imagine, occupying what I supposed to be the upper parts of the body, and my feeling of astonishment almost became one of disgust, from the peculiar character of the organs of these singular beings; and it was with a species of terror that I saw one of them mounting upwards apparently flying towards those opaque clouds which I have before-mentioned. 48.

These elephantine beings turned out to be far superior to man. They had modes of perception of which we are ignorant---wider spheres of vision ---more exquisite organs of touch---more refined pleasures---more intellectual pursuits. Their astronomical records went back a hundred times farther than ours. It was gratifying to find that, in Saturn, there were no wars---their only competitions being in pursuit of pure glory. The columnar masses, and even the opaque azure clouds, turned out to be works of art, connected with processes for the preparation of their food (for they resembled us a little in eating and drinking) and philosophical researches. We

are unable to follow the philosopher through the cometary worlds; but collect that—"the universe is every where full of life, but the modes of this life are infinitely diversified, and yet every form of it must be enjoyed and known by every spiritual nature before the consummation of all things." Also that it is a divine law, that although our spiritual natures rise through different stages of planetary life, they leave their dust behind them, and only carry with them their intellectual powers.

"You ask me if they have any knowledge or reminiscence of their transitions; tell me of your own recollections in the womb of your mother and I will answer you. It is the law of divine wisdom that no spirit carries with it into another state and being any habit or mental qualities except those which may be connected with its new wants or enjoyments; and knowledge relating to the earth would be no more useful to these glorified beings than their earthly system of organized dust, which would be instantly resolved into its ultimate atoms at such a temperature." 56.

Finally, he was informed by the genius that the love of knowledge or of intellectual power is, in its final development, the love of God—and that the future destinies of our souls depend upon the manner in which this love of knowledge is exercised in this state of existence. When well applied we mount higher in the planetary systems—when the reverse, we "sink in the scale of existence," and continue on earth, or in some inferior planet, "till our errors are corrected by painful discipline."

It is true that in the succeeding dialogue, these doctrines of the genius are combated by Ambrosio, his Catholic companion, and the philosopher appears to be converted by the arguments of his opponent; but the impression left on the mind of the reader is, that the scheme sketched out by the genius is that to which the philosopher had brought his mind by long reflexion, while the arguments of Ambrosio appear inadequate to so sudden a conversion of the author.

It is not a little curious that a man who has been all his life experimenting upon *matter*, and consequently pursuing researches the opposite to those of metaphysics—especially these ultra-metaphysics relating to the future state of the soul and the beings of other orbs, should all at once ascend from this lowly earth, and range excursive through the regions of Fancy. In the third dialogue, the subject of geology, and the history of the Earth are taken up, and some ingenious remarks and speculations thrown out. As these topics are more nearly allied to medicine than those just reviewed, we shall dedicate a short article to the remainder of Sir Humphry's work in our next number.

XIII.

PRACTICAL REMARKS ON AMPUTATIONS, FRACTURES, AND STRICTURES OF THE URETHRA. By *Stephen Love Hammick*, Surgeon Extraordinary to the King, and late First Surgeon of the Royal Naval Hospital at Plymouth.

WE were a good deal disappointed on turning from the title page to the preface of this work, to find that these practical remarks were no more than

clinical observations delivered to the surgeons' mates of the navy at various periods of the late war. A surgeon who had had such a theatre of experience, and who attained such vast provincial renown as Mr. Hammick acquired, might have produced something of a higher character than the present volume of elementary details, delivered to the juniors of the naval medical profession. Surely a man of half the talents which the author is supposed to possess, might, at his time of life, have addressed the very heads of the surgical profession, on topics of the highest interest. Were we inclined to indulge in satire, on this occasion (but our readers are aware that we never deal in that article) we should say that, instead of a spank new frigate, just off the stocks of Devonport, we found, on boarding the vessel in question, an old friend with a new face—a cruiser fitted out in hamoaze with a cargo of old naval stores for the London market. There is not a plank in her decks that is not as familiar to our eye as the romantic promontories round Catwater and Causand Bay—not a cask in her hold in which we do not recognize an old *mess-mate*, SALT-JUNK—not a biscuit in her bread-room untenanted by our quondam companions in arms—the woevils.

> Et quodcunque semel chartis illeverit, omnes
> Gestiet a furno redeuntes scire lacuque,
> Et pueros et anus.

But to drop metaphor. It must be very evident to our readers that Mr. Hammick's work is not adapted for analysis in this Journal. Its elementary character forbids such a mode of procedure, whilst, on the other hand, it must be supposed, that mixed up with much common-place matter, are many practical and valuable remarks. We shall select some of them as well as we can, but our readers may believe that picking out insulated passages can be pleasant neither to ourselves, nor the author. The first part of the work is dedicated to the subject of amputations, the second to that of fractures, the third to the consideration of strictures of the urethra. We are sorry to say that there is neither table of contents, nor index, nor any other mode of arrangement that we can discover; indeed Mr. Hammick would seem to have taken a hint in book-making from the Sybill of old, and selecting some windy day in Plymouth Sound, tossed the notes of his Clinical Lectures into the air, from whence, by good luck, they fell into their present form.

AMPUTATIONS.

Our author never performed amputation at the hip-joint, but assisted at that performed by Mr. Brownrigg in the Military Hospital of Plymouth, and observes, that it is an operation which no competent surgeon would shrink from attempting, when circumstances render it necessary. The plan which he would pursue if called upon to operate differs from that adopted by Mr. Brownrigg, and is as follows :—

"In the removal of the thigh at the hip-joint, you only have the power of compressing the femoral artery at the groin; consequently, if all the muscular parts on both sides are

divided before the bone is taken from the socket, which was the case in this operation, you must cut through the obturator artery, as well as those branches which come out of the pelvis at the posterior part, consequently you have several vessels bleeding at the same moment, without the power of compression; and from the thigh not being removed from the acetabulum, you have only the slight space formed by the gaping of the cut muscles all around the bone to wedge in your hand, and get hold of the mouths of the bleeding vessels,—which mode of operating places you between two difficulties, either of allowing several of these arteries to bleed, whist you are employed in cutting open the capsular ligament, dividing the round one, and removing the thigh from the joint, or of attempting through this narrow space, to secure the vessels; and should there be any loss of time from their retraction within the muscles, or from any of the impediments which every now and then occur in taking up the arteries, a considerable quantity of blood may be lost, which, if not immediately fatal, may so far debilitate the patient as to render him incapable, should the stump not heal kindly, of struggling through long periods of suppuration. Now, the method I should recommend would be this:—I should place my patient on a table, with his body half-raised, leaning back against the breast of a person sitting behind him; the patient's lower limb should hang over the edge, so that the groin should be fairly exposed, and on the stretch; the thighs are to be separated, so that I might, if I chose, be able to sit down on a stool in front, with my foot resting on the bar of the table, of such a height as to allow the right elbow to rest on the knee. I should direct a steady assistant to place three fingers of his right hand close to the femoral artery, on its iliac side, as it emerges from under Poupart's ligament, pressing them down, so as in some degree to protect the vessel, and, if necessary, to be in readiness to make pressure on the artery: I should then make an incision merely through the integuments with a scalpel of the largest size, from the iliac edge of my assistant's fingers, carrying it downwards and upwards to below the trochanter major, so as to form the line of the outer flap, which is to terminate near the tuberosity of the ischium: this being done, the assistant should shift his fingers to the pubic side of the femoral artery, with the same view of protection as he did before on the iliac side; then I should mark out the intended flap on that side by an incision merely through the integuments; these lines would very nearly join in front, excepting that part over the femoral artery covered by the assistant's fingers, but they are to meet behind, carrying them higher or lower, according to the muscularity of the subject. If I was then satisfied that this tract through the integuments offered a fair chance of forming a good stump, I should follow it; if not, I should alter my line, by carrying it a little up or down. This being settled, the assistant's pressure is again to be on the iliac side of the artery, when, by a bold stroke, I should go down by the line already made in the integuments to the bone on the outer side, and immediately dissect up, and turn back the muscles, to form the outer flap, and should secure in my progress any arteries that might be troublesome. The next steps would be to cut through the capsular ligament, so as to lay open the joint,—then to divide the round ligament, and the limb would immediately drop a little; when with a smaller scalpel, carried as close to the bone as possible, the attachment of all the muscles should be divided; and as soon as I could lay hold of the head of the femur with my left hand, I should draw it outwards from the joint, so as to allow of passing a small amputating knife close to the bone, on its inner side, to be carried down till I came to the line of my inner incision, and then resigning the head of the femur to an assistant, I should place the fore-finger of my left hand on the point of my knife, and dash it directly out in the grove previously made in the integuments, so that the femoral artery would not be cut through till the moment of the separation of the limb from the body; then instantly seize hold of the artery, directing the assistant to keep strong pressure on it as it lays over the edge of the pubis: at this time the other assistants might be pressing on or securing the mouths of the other vessels, which would not be long in tying after the femoral artery was in safety; so that, in fact, by this method, none of the more important arteries would be cut through, till the division of the muscles on the inner side, which is to separate the thigh; and then we should have an open surface, and nothing to prevent our meeting the bleeding vessels fairly: these being all tied, the lips of the wound are to be brought together, either transversely or longitudinally, whichever at the moment appears the easiest and most convenient direction; and let them be kept in contact by adhesive straps, with central holes, to allow of the ligatures to hang out, and any matter to escape. Spermaceti ointment, spread on lint, is to be applied, and over it a square piece of calico, which is to be fastened by tapes to a circular roller on the loins. In Mr. Brownrig's case the lips of the

stump were brought together transversely, and they formed a most perfect line. *An assistant should be constantly by the bedside of the patient till the ligatures are away;* the period and method of dressings are very nearly the same as those for an amputated thigh." 21.

On the foregoing proposal we have nothing further to remark, than that we would rather be the operator than the assistant; for to be constantly at the bed-side of a patient till all the ligatures come away, would be no joke. Mr. Hammick deprecates scraping the cartilaginous lining of th acetabulum with a scalpel, and disapproves of the plan recommended by Mr. Charles Bell, of commencing the operation by cutting down on and securing the femoral artery.

With respect to amputation of the lower part of the limb, our author would run many risks for the advantage of operating below the knee, that joint being so valuable a point d'appui for the wooden leg. It occured to him several years ago, that, after having sawn through the bone, it was discovered to be so diseased in its inferior part, that although another portion of two inches was removed higher up, he was obliged instantly to amputate above the knee joint; the patient fortunately did well. Since that period Mr. Hammick has cut off some legs where the risk of the same accident was equally great, and yet it has not happened. After describing the steps of the operation, he makes the following judicious observations.

"Our principle, therefore in amputating a leg is the same as for the thigh,—first, to separate the integuments by a circular incision, and then to draw them up from the muscles, just touching, if necessary, their cellular connexion with the point of the knife, so as to detach them, more or less, according to the muscularity or emaciation of the limb. It is more necessary to have a greater freedom of integuments to cover the face of a leg than a thigh stump. In order to avoid the sharp edges of the tibia, we prefer sawing the bone separately, so that the fibula may be somewhat shorter than the tibia, the benefit of which you will discover in dressing up the stump, particularly if the limb be greatly emaciated; when by the common method of sawing both bones at once and making them of the same length, you occasionally find the point of the fibula projecting against the inner side of the integuments, so that it brings on pain and inflammation, and sometimes the bone will ulcerate through, unless you take the greatest care, when you bring forward the integuments to the central logitudinal line of your stump, not to make pressure on it. If you intend to saw the bones separately, it is better to get through the fibula first, which avoids the risk of splintering that small bone, which might happen by the weight of the limb on turning it to get at the fibula, supposing the tibia had been sawn through. For comfort and convenience, a stump below the knee cannot be too short; taking care to keep clear of the joint, and that it may be so formed that the tibia may be cut through about an inch and a half to two inches below the tubercle, which will keep you free of the tendinous insertion of muscles, which, if divided, might slough. Sailors have frequently requested me to make their stumps as short as possible, so that when the knee-joint rested on the wooden leg, there might be but little projection from behind; for, when the stump is long, its weight and swinging about retard and fatigue in walking: two men, who have lost their legs in

the East Indies, came to me in this hospital at one time, whose stumps were so long, having been cut off just below the calf, that they were rendered almost helpless, and at their earnest entreaty I removed them to the usual shortness, for which they were very grateful. Take care, however, not to go too close up to the knee; I had once a patient sent to me eleven days after his leg had been amputated on board in the heat of battle, and so close was it done to the head of the tibia, that the joint was freely exposed, and it became necessary to cut off the limb above the knee, to save his life. We are of opinion that it is more to the comfort, besides incurring less risk, for all persons to have the limb amputated at the usual place below the knee than to perform it, even in such cases as would admit of it, any where below the calf; people of affluence, who can afford an expensive and complicated artificial limb, instead of the common wooden leg, may be disposed to have the operation lower down, but for others not similarly situated, there can be no doubt of the spot that is best to be selected, and the risk is certainly less, with a better prospect of a sound stump." 30.

Speaking of amputation at the shoulder-joint, Mr. H. observes that the frequency with which some surgeons have performed it, in comparison with others, who have had the care of many more surgical patients, must induce us to suspect that it has often been resorted to, when the limb might have been amputated below. This, of course, is bad practice, for, not to mention the greater danger, the body is more awry after the shoulder-joint operation than that below the articulation; and besides, if the stump in the former case turn out amiss, no resource remains in amputation higher up. During the operation, our author is of opinion that the patient should be laid on a table, with the arm supported over the edge. When seated on a chair, he winces under the pressure of the key on the subclavian artery, and sometimes gradually slides down till he is nearly on the floor.

In amputation of the fore-arm, the tourniquet is to be placed on the arm as near the elbow as possible, and the longer the stump of the fore-arm the better. The patient sits on a form, leaning back against the chest of an assistant, who holds the elbow half-flexed very securely, and grasps the integuments of the fore-arm, whilst another holds the lower parts by the hand or the wrist, as is most convenient; the fore-arm is maintained half-supine, with the integuments on the stretch. If the operation is to be near the carpus, the first incision should go at once down to the bones, the assistant forcibly retracting the parts; and when these are free from the radius and ulna, and drawn upwards an inch and a half, the catlin is to be passed between the bones "at the upper part of the retraction:" If the knife were inserted lower down, the muscles would require to be slit up from between the bones, by which they would be too much divided, and the inter-osseous artery would be in danger of being cut too high. The retractor is next to be inserted, the fore-arm pronated, and the bones sawn through, the vessels tied, and the stump to be dressed, with the fore-arm half-supine. The patient is to be put to bed with the shoulder supported, the elbow bent, and the fore-arm prone, resting on pillows; after the fifth day, the patient may get to the sofa; and, in a day or two more, may walk about with his arm in a sling, supported on a pillow.

On concluding his directions with respect to the particular amputations, Mr. Hammick informs us that, during his service, he has performed two hundred and eighty-seven amputations, of which sixteen have been fatal. We are sure that this is not meant as a gasconade, but ill-natured persons

might impute to Mr. Hammick a disposition to the puff oblique, of which he is utterly innocent. Within the last eighteen years, the number of amputations has diminished very considerably, in consequence of the malignant ulcer having ceased its destructive ravages in the navy.

Our author disapproves of ligatures of single silk, and thinks that the practice has been pushed by some surgeons a little too far. In his opposition, he would seem to be rather prompted by his fears than by actual experience of their danger, for he confesses that he never saw hæmorrhage from their use, but, in two instances, was very much afraid of it. We must confess that we have not been witnesses, any more than Mr. Hammick, of disastrous consequences from single silk ligatures, nor do we participate altogether in his repugnance to their use. Mr. Hammick believes, and the creed, we fancy, is somewhat heterodox, that larger ligatures are more easily and earlier thrown off, in proof of which position he cites the case of "a youngster," in whom three single silk ligatures remained in the stump after amputation of the thigh for ten months, and at length appeared to rot away. In three instances, where the ends of the ligature were cut off close to the knot, and the edges of the wound attempted to be closed over it, troublesome abscesses succeeded. The experience of the best surgeons is in accordance with our author's on this point.

"Having made these observations to you on the various ligatures, the following is our method:—we use either silk or fine thread, generally taking the latter, making our ligatures from one to eight threads in thickness, waxing them a little into a round form, just to connect them slightly together, so that they may be tied without the risk of being of unequal lengths, or twisting up under the knot, it being absurd to wax them to any great degree to prevent their rotting, for they may remain months without being in the least injured, and where much wax is used you will see it crack or scale off at the time of tying your ligature." 47.

It signifies nothing that this kind of ligature is not commonly employed, for it by no means follows that the established practice is the best; we therefore recommend surgeons to make trial of Mr. Hammick's method, for his experience in these matters renders his opinions worthy of attention. As soon as the limb is removed, whilst the tourniquet is kept tightly screwed, spunge the surface of the stump well with warm water, and secure the arteries in succession, taking care to look that the side of the vessel has not been injured by the knife or catlin, above where you place the ligature. The following observations on the mode of unscrewing the tourniquet are, as far as we know, original and ingenious.

"Having satisfactorily secured all the important arteries of the stump, boldly unscrew the tourniquet, so that the blood may come down with a sort of rush, and you will immediately afterwards see the ligatures in movement by the pulsation of the arteries; then secure any of the smaller ones that may require it. My object in rapidly unscrewing the tourniquet after the large arteries are secured, is, that the rush of blood may force any of the secondary ones which may have retracted during the operation into the muscles, to bleed; otherwise they may lie concealed and undetected until the patient has been two or three hours in bed; when, re-action taking place, from the fear of the operation having subsided, and the rallying of the system from the loss of blood and faintness, hæmorrhage comes on, and you are frequently obliged to open the stump to secure the vessel: if not, the blood thrown out forms a large cake, acting as an extraneous body within its lips, preventing union, not only by the first intention, but frequently doing much more mischief;

particularly if it be in a stump where there has been preserved too much integument and too little muscle. Now, what is the effect of a cautious and gradual slackening of the tourniquet, which you see so commonly done? Why that the face of your stump becomes a bleeding surface, so that innumerable vessels are tied. How common it is for the surgeon, after having secured all the vessels he could get hold of, whilst the tourniquet was tight, to hear him say to his assistant, 'Pray unscrew very gradually; but mind you stop the very moment I tell you.' Well, after being slackened a turn or two, an oozing takes place all over the stump, and the surgeon immediately cries out for the tourniquet to be screwed tight, as the patient is bleeding fast. Now mark what he has done; he has just slackened the tourniquet enough to allow the blood to pass down by the important arteries, and has kept it quite tight enough to prevent the blood getting back by the veins, or the anastomozing branches, so that the whole is rendered a bleeding surface; and a timid surgeon will go on securing vessel after vessel to his own astonishment, the greater part of which need not have been touched; and the hæmorrhage would have ceased on boldly taking off the tourniquet, and spunging the face of the stump with cold water. I have found that the slower the incisions have been made in removing the limb, and the more emaciated the patient, the more numerous, in general, will be the bleeding vessels. In amputations, as well as in large incised wounds, by accurately examining the surface, you will detect arteries of the second and third order occasionally protruding beyond the muscular parts at least the length of an eighth or a quarter of an inch, pulsating violently, though without any flow of blood. Their mouths, on close inspection, appear shut, with their ends forming an obtuse point; and this happens more frequently in very muscular subjects, where the operations have been very dexterously performed. Now, should you pass over these arteries without securing them, you will find, that within six hours of the patient having been returned to bed, by the muscular parts relaxing from the return of warmth, hæmorrhge will pour forth from these vessels. You had better, in all such cases, snip off the end of the projection, and immediately a start of blood will take place, convincing you of the necessity of tying the artery before you have closed your stump." 51.

If the vessel should be found in an ossified or diseased state, it should be secured by passing a needle, in doing which it is desirable to include a pretty good cushion of surrounding substance, to prevent its being cut through or yielding, which Mr. H. has "seen it do like a rotten pear." Sometimes when even the surrounding substance has been so sloughy and soft as to give way, the introduction of a piece of lint within the noose of the ligature has been perfectly successful. When the needle is used; we should be particularly careful not to wound the vessel with its point, for obvious reasons. Mr. Hammick particularly cautions surgeons not to grow fidgetty and uneasy if a ligature on an artery is retained beyond the usual time, and warns them never to employ force in its removal. Twice from such a cause has he seen the patient's life in imminent danger. In the first case, the stump was dressed by the surgeon of a gun-brig on the third day after amputation, and every ligature forcibly removed, with the effect of producing the greatest pain; extensive inflammation and sloughing followed; tetanus was threatened; and it was several months before the stump was healed. In the second case, similar violence in attempting to remove the last ligature from the stump of an upper arm, was likewise followed by extensive inflammation and sloughing. In cases of unusually long retention of the ligature then, the practice is to keep the stump clean and tran-

quil, and to wait with patience till nature choose to permit its separation. If, however, the patient insist on some force being applied, put the ligature only gently on the stretch around a piece of flat bougie, which is to be secured beyond the edge of the stump by a slip of adhesive plaster, repeating it at every dressing. In the case of "a nice little lad" from the Impregnable, whose thigh was removed for the malignant ulcer, our author gently touched the ligature on the femoral artery with the forceps on the tenth day, when he shrieked out with pain, violent tetanic spams instantly succeeded, and in forty-six hours he was dead. On dissection no nervous twig was found included in the noose with the artery, nor was any thing discovered to account for the fatal result.

FRACTURES.

Having concluded the subject of amputations, we now pass to that of Fractures. The splendid work of Sir Astley Cooper on this part of surgery will, like the rod of Aaron, swallow up for many years to come the interest that might attach to the productions of authors of less calibre, and we shall therefore merely glance at Mr. Hammick's observations on the non-union of fractured bones. Mr. H. believes that the want of union is generally attributed to too few causes, mere motion of the fractured ends not being by any means the whole and sole one.

"We, and most surgeons of the present day, use splints of such a length as firmly to secure the heads of the bones, so that, by their being fixed, any motion is precluded to the fractured parts. There are some, however, who apply splints so short, that they extend only a little distance each way beyond the fracture; and let these be bound ever so tight, they cannot preclude a freedom of motion to the brokon bone; and this, we shall find, is a frequent cause of a retarding, if not of a total want of union. The older surgeons were often afraid of being disgraced by such a superabundance of callus as might cause any outward deformity; and to prevent this from occurring, they bound down short splints very tightly over the fracture; we now never employ them with that view, from knowing that such a deposit of callus very much strengthens the limb, and as the exuberance is concealed it can be of very little moment; besides, the binding down of splints in this way does not prevent the formation of the callus, though it might give it another and a deeper direction; and although it might hinder it from showing itself so prominently outwards, yet the practice did a great deal of harm; for when nature would have deposited it in the most commodious manner for the strength and security of the limb, it was forced by this interference into the interstices of the muscles, whereby their action was ever aferwards considerably impeded." 114.

Disturbance of the limb will often prevent union, a good illustration of which is given by our author in the case of a gallant general officer, who got his aid-de-camp to pull long and lustily at his foot every night and morning, after fracture of his thigh, in order to prevent any shortening of the limb! Another cause of non-union is one the very *antipous* of too much motion, viz. too little. Some years ago, Mr. Hammick was requested to see a boy in Plymouth, of a scrofulous aspect, in whom there was no union six weeks after a fracture of the leg; the limb had scarcely swelled, and there had been but very little pain. Mr. H. ordered the leg to be moved every *day* without any splints, and after their re-adjustment, the lad was to quit his bed for the sofa, and attempt to walk about on crutches, carrying the

fractured leg well secured in a sling. Considerable inflammation of the limb was the consequence of this treatment; every thing went on well, and the bone soon became perfectly united.

Union may be prevented by the system being under the influence of the secondary symptoms of syphilis, and in many cases the patients did well on eradicating that disease. A marine was in the Plymoth Hospital for seven months with a fracture of the leg, which would not unite. Our author discovered that he had been in the house, twelve months previously, for a bad venereal complaint, and that, after his dismissal, he had suffered under secondary symptoms. This "was quite sufficient to put him under a course of mercury," and before the soreness of his mouth went off, his leg was firmly united.

"Remember, however, that although mercury will effect a cure by uniting the bone, when the patient is labouring under the distress of the venereal virus in the system, or what are called the secondary symptoms, yet it will sometimes, when used for the treatment of the primary ones, retard it, by the debility it produces; yet mercury will frequently be required by patients who never had any syphilitic taint, not only to act as an alterative, but even it will be necessary to push it to a considerable extent before union of a fractured bone will take place. Many of you recollect a marine sent in from head quarters, for a fracture of the leg which had occurred seventeen weeks previously, and where no union had taken place. He was apparently in perfect health, never had had any venereal taint, and was free from all appearance of disease. The camphorated mecurial ointment was locally applied till salivation was produced, when the callus fully and firmly formed, and the cure was effected. This, however, so commonly occurs, that it will not be necessary to trouble you with the detail of any more cases in confirmation of it." 118.

Scurvy, as might naturally be expected, will prevent union, nay, more than that, it will dissolve it after it has been formed for many years. In the seige of Gibraltar, when this disease made great ravages, bones became separated which had been a length of time united. And, what wonder that a part of the human fabric, which has seen but a few Winters, should give way under the ravages of a disease which breaks down the whole constitution of the frame, and unknits its firmest sinews! New growths can never boast of the vital power possessed by those portions which have grown with the body's growth and strenthened with its strength, for it is well known that tumours or formations, however free from malignancy they may be, have ever a tendency to run into ulceration, in other words to die, under the influence of comparatively slight causes of injury. But this en passant. Not sea-scurvy only, but that scorbutic or cachetic condition which bad diet, bad air, or a bad constitution will kindle up at home, has a mischievous effect on the process of union. Mr. Hammick knew a gentleman, of a very scrofulous habit, who had his leg broken by the kick of a horse. He fell into the greatest state of exhaustion, had hæmorrhages from various parts, his teeth became loose, his limbs swelled, in short, he had all the symptoms of sea-scurvey; the bone never united; and after a long period of great suffering he died.

"You often see among the poor that bad diet and foul air, from confinement in ill ventilated dark rooms, or under ground cellars, will prevent union, when by giving them more nourishment, or even removing them into purer air, they will rapidly recover their strength, and the limb will become firm. In the beginning of my service in this hospital,

when we were exceedingly crowded with patients, it was the custom to select the extreme cases of surgery for the same wards, and not to distribute them about in different ones, as I have done for some years past; and at that period it was no unusual thing to find that union in fracture was very much retarded, and on an average took two or three weeks more than at present." 120.

Pregnancy, it is well known, will frequently prevent the union of a broken bone for a time, just as it will put a temporary stop to the morbid process of disease, for instance, that of phthisis. Mr. Hammick has seen three cases of this kind, in all of which union was ultimately affected. We saw a very remarkable instance of the same thing about two years ago, but in spite of every measure that could be devised, no union was obtained, and the patient remains afflicted with an artificial joint in the humerus.

The causes, then, of non-union being various, and we believe there are more than those alluded to by Mr. Hammick, some discretion must be employed in the treatment.* Supposing, however, that every thing short of an operation of some kind, has failed, and that one must be selected;—We have the choice of four—one to cut down and irritate; another to cut down and apply the actual cautery; a third to pass a seton between the ends of the bone; and a fourth to cut down and remove those ends.

"The first, of cutting down and irritating the ends of the bone, cannot be of any advantage; when an artificial joint is formed, the ends of the fractured bone are covered with cartilage, sometimes united by a ligamento-cartilaginous substance, having occasionally a perfect capsule, within which is a fluid very similar to the true synovia. Now, cutting into this, and irritating the ends of the bone, can never be of any service,—it is impossible for them to unite whilst the cartilage remains. But you will be told that this operation has sometimes succeeded. Yes, it certainly has; but, in my opinion, when it has, it has been performed without being required; that a regular artificial joint, such as above described, had not existed; that the ends of the bone merely lay without union, which by discovering the cause, and adopting a suitable treatment, might have firmly united them." 123.

We agree with our author, that if the case really requires our cutting down upon the ends of the bone, it also requires something more than our merely "irritating them." This is sheer child's play; it is giving the patient all the pain, and much of the danger, of a severe operation, without its proportionate advantages.

In illustration of the second operation, that of applying the actual cautery to the ends of the bone, a case is related by Mr. Hammick. A lady with ununited fracture came from Ireland to London, and was received into one of the hospitals of the metropolis. At the suggestion of "a French surgeon," an incision was made on the out side of the arm, down to the fractured ends of bone, and the actual cautery thrust in between them. The pain thus

* The observations on non-union by Mr. Amesbury, and the cases adduced by that gentleman, have proved that none of the following operations are required nearly so often as they were before the introduction of his various apparatus. We have made some observations on this subject in a former Number of the Journal, and need not go over the ground again. By the bye, Mr. Hammick takes no notice of a method which is very often of service in promoting union, we mean the application of blisters.—ED.

produced was indescribable, and such was the inflammation and sloughing which succeeded, that the patient's life was in considerable danger for many days. She survived, however, but her condition is worse now than before the operation, for the fingers have become so drawn up and weakened, and at times so painful, that her limb is worse than useless.

Mr. Hammick does not see how the seton can do any good, nor can he say what he would wound if he employed it. In his last case he would have "exactly passed it through the ossified artery between the ends of the bone," and a most unlucky business he would have made of it. Although our author cannot see how the seton can do good, it is quite certain that it has done so, and that not unfrequently. Theories and prejudices *should* give way to facts, but we remember the old adage, that "none so blind as those who will not see."

"The last method of cutting down and removing the ends of the bone, is certainly the one most likely to succeed, but then it is a very severe undertaking. You must recollect that the failure of union has been in a case of simple fracture; that, by this operation, you convert it into a bad compound one; for what do you do? You cut down to the ends of the broken bone, turn them out through the wound, and saw them off; to do which the wound must be pretty extensive, otherwise your saw would lacerate and jag the integuments and muscles, particularly if it be of the thigh. Now, when you have a compound fracture, with protrusion of the bone, the end of which it is desirable to remove, you very well know how difficult it is often to save the limb, and at the very best what a formidable case of surgery it is: then how much more so must that case be where you have to turn out both ends of the bone, and saw them off? Some surgeons have only removed one end, but they had better have done nothing at all; because whilst one remains covered with cartilage, union can no more take place than if they were both to remain so. It is certain that bone cannot unite to cartilage: the ossific anchylosis of the knee-joint, for instance, can never take place until the cartilage covering the two bones to be united, as the femur and tibia, be so far destroyed as to allow of bone uniting to bone; and, consequently, the same process must take place where union has failed after fracture, from their ends being tipped with cartilage. After all, however, this operation of cutting down and sawing off the ends of the fractured bones, is the only one that can, I think, succeed, supposing that a perfect artificial joint is established. I have never performed it; and very strong and weighty reasons must arise to bring my mind to do it. Had we attempted it in our last patient, as soon as I had introduced my scalpel between the ends of the bone, to divide the ligamento-cartilaginous connexion, I should have cut through, without any possibility of avoiding it, that large ossified artery running between the broken portions of the thigh; and you saw with what difficulty I secured the vessel even when the limb was off, and nothing but a lucky passage of the needle did it; how much more, then, would the danger have been increased with the limb on. The chances are that amputation must have been immediately performed, under very discouraging circumstances; or, if we could have stopped the blood without it, we should have considered it fortunate." 127.

Our author has thus disposed of all the operations for an artificial joint after ununited fracture, and as one is inefficient, another too severe, a third of no use, and a fourth pregnant with danger, it follows that he would employ none or neither. Let us see the substitute found by Mr. Hammick:

"From this detail you observe that we have grounds to justify us in saying, that there are many more causes for a failure of union in fractured bones than are commonly imagined; that by finding out the cause you may almost invariably remedy it, and obtain a

cure; that where operations have been successful, a longer delay and other means would have probably rendered them unnecessary; and that when all other judicious and well-selected modes fail, it is more than doubtful whether any operation short of amputation ought to be employed. In this case of Sheridan's, which required amputation, you have seen the ossified state of the arteries of the whole of the lower extremity; and it is highly satisfactory for us to know, that nothing whatever could have produced a union of the bone, and that the taking off the limb was the only chance the patient had." 127.

Thus then amputation is the salve which our author would apply, rejecting all the other nostrums to which we have adverted. Now really we do think that any one of the operations formerly described is preferable to this dernier resort, this opprobrium of surgery, and we suspect that patients would be commonly of our opinion; such a cure for ununited fracture is like a wooden leg for the removal of corns, effectual, but unpleasant. We cannot attach much importance to the thrice-cited argument of the ossified artery, inasmuch as in all patients blood-vessels are not in the condition, and to frame general rules on the exception appears to us to be but indifferent reasoning.

Our limits now compel us to desist, though many more practical remarks might be culled from Mr. Hammick's book. We are not in the habit of winding up our analyses with those little bits of oracular judgment, like cheese after meat, with which some of our contemporaries are apt to favour the author and their readers. Still we may say of Mr. Hammick's work, that it contains too many practical hints to deserve to be overlooked by the surgeon engaged in practice, and that it is too discursive and imperfect ever to be adapted for a standard work to the surgical student. It is certainly not distinguished for classical lore, peculiar elegance of language, nor much acquaintance with the practice of contemporaries; indeed we believe there is scarcely a reference to a brother surgeon from the first page to the last. This might be explained were it worth while, but it is not; and we therefore conclude by recommending the perusal of the work to such of our surgical brethren as have a little time upon their hands, and are already tolerably acquainted with surgery as it is.

XIV.

ILLUSTRATIONS OF SOME OF THE PRINCIPAL DISEASES OF THE OVARIA, THEIR SYMPTOMS AND TREATMENT: TO WHICH ARE PREFIXED, OBSERVATIONS ON THE STRUCTURE AND FUNCTIONS OF THESE PARTS IN THE HUMAN BEING AND IN ANIMALS. By *Edward J. Seymour*, M. D. &c. &c. Physician to St. George's Hospital. 8vo. pp. 128, with 14 Lithographic Plates, 1830.

DR. SEYMOUR deserves great praise for the zeal with which he prosecutes the study of morbid changes in the human body, and the present work affords ample proof of the talent which accompanies and directs that zeal.

In the first chapter of the work Dr. Seymour gives a concise but clear sketch of the structure and functions of the ovaria, first in the human subject, and then, in various animals. This chapter displays great research, and much ingenious reasoning. It would be impossible for us to do it justice by extract or analysis, since it is, in itself, a close analysis and critique. But we recommend it to the attentive perusal of the reader. One passage only, near the end of the chapter, we shall here introduce as it contains Dr. Seymour's conclusions respecting the long disputed subject of Corpora Lutea.

"It must be admitted by all that corpora lutea exist without impregnation occasionally. They are figured by Valisneri, and Sir E. Home; and the observation has been confirmed by many living physicians and surgeons. That it occurs after impregnation, is certain, and proved by the observations of Haller, who traced their gradual formation; but if, as supposed by Sir E. Home, they are necessary to render the ovum fit for impregnation, they should exist nearly always in virgin animals at the time of puberty. This is by no means the case. It has occurred to me to have examined the ovaria in the human being, and in animals at the period of puberty, in very many instances; many had ova ready for impregnation, large, projecting, vascular, yet no corpora lutea were visible, which induces the following conclusion, that in every instance these animals must have been barren, or that the formation of corpora lutea is not a necessary preliminary process to impregnation.

"From these premises, comparisons, and observations, my opinion has been formed, that corpora lutea are the result of the change which takes place in the ovarium by the bursting and discharge of the ovum, occurring rarely in virgin animals, because the bursting of the ovum is not a frequent but only possible occurrence, but always following impregnation, and diminishing as gestation proceeds.

"It may here be asked, of what advantage is it to determine accurately the formation of these bodies? We have seen that their production is probably influenced by strong moral as well as physical impressions, the result of great vascular excitement of the part, and their absorption effected by great activity in the vessels of that system. Any deficiency, then, in the quantity of vascular excitement necessary—any obstacle to the exercise of absorption—would produce changes in these parts differing from the natural ones, which they were intended to undergo,—would, in a word, produce disease; and it remains to be discovered whether any of the serious and complicated diseases of these organs are to be traced to alterations which the corpora lutea undergo from any or all of these causes." 33.

Seven beautifully executed plates illustrate the anatomy and physiology of the ovarian organs, comparative and human.

In the 2d chapter Dr. Seymour enters on the subject of structural diseases of the ovaria. These diseases are arranged under three heads—those arising from inflammation—those arising from enlargement of the natural structure, and those from addition of new structure formed by disease:—these last including scirrhous and fungoid growths—lastly, those deviations from natural structure which result from obstruction of function, and also congenital malformations.

"Inflammation of an acute form attacks the substance of the ovarium, which has been found in a state of suppuration after acute inflammation of the womb and its appendages in women who have died in child-bed. This likewise does not appear to be marked by any peculiar symptom: the suppuration in such cases has been of the diffuse kind.

"Softening also takes place as the result of acute inflammation of these parts. A case recently occurred under my observation, where death from inflammation of the womb occurred about three days after delivery. The whole of the cellular membrane under the peritoneal covering of the uterus, and under that lining the pelvis, was in a state of diffuse suppuration, and the absorbent vessels loaded with pus could be traced nearly as high as the diaphragm. The ovaria were in a state of extreme softness, presenting the appearance of a vascular pulp, but no purulent matter was visible.

"The substance of the ovarium is likewise subject to inflammation of a chronic form, which may certainly exist independently of inflammation of the substance of the uterus or its coverings. Abscess of the ovarium does indeed appear to be a rare disease, but it nevertheless occurs; and indeed, in reasoning on the subject, it would not be easy to account for the difficulty or impossibility of inflammation and its result, suppuration, occurring in the loose cellular texture of this organ. The following case of this disease will best describe the symptoms and post-mortem appearances.

"A young woman, aged 17, of the lowest and most unfortunate class of females, was a patient of Guy's Hospital, under the care of Dr. Bright, in the autumn of 1823.

"She was greatly emaciated, had a very quick and feeble pulse, a shining red tongue, and constant watchfulness. She suffered from constant and irrepressible diarrhœa, and for many successive days vomited both food and medicine: the catamenia were absent. The case made a considerable impression on my mind, from the extreme emaciation and colliquative diarrhœa, without any evident symptoms of disease of the lungs or intestinal canal. After having been in the hospital about two months, she suddenly complained of most acute pain over the abdomen, and in a few hours expired.

"On opening the abdomen, death appeared to have been produced by the effusion of a large quantity of pus into the peritoneal cavity, which escaped from an abscess in the right ovarium, which abscess appeared to arise from suppuration in the substance of the viscus, similar in every respect to phlegmonous abscess in any part of the body, and not connected with any cyst or change, or addition of structure, the product of morbid growth." 40.

Chronic inflammation of the ovarium, like chronic inflammation elsewhere, ends in thickening and enlargement of the part---such cases often remaining stationary for many years. Dr. Seymour hazards some speculations on disease of the Graafian vesicles, or corpora lutea, as occasioned by excited feelings connected with the uterine system; and queries whether those instances of purulent depôt, found in cysts of the ovaria, might not be owing to some of the superficial vesicles having undergone rupture and change from the above sources of excitement, independent of pregnancy, and arrived at the purulent state described by some authors. The fluid of the Graafian vesicle is liable to disease. It is often red, and even black, from admixture of blood; and from the following case, it appears to our author that it may become altered from imperfect fecundation.

"A woman, æt 31 years, was admitted into St. George's Hospital in November last, labouring under ascites and anasarca, depending on the heart becoming enlarged after repeated attacks of rheumatic inflammation. By moderate blood-letting and ordinary diuretic medicines, combined with mercury, her dropsy entirely disappeared; and feeling no further inconvenience, she was dismissed at her own request, warned, however, that the smallest imprudence would bring back her disease. She remained at home a month, during which time she cohabited with her husband: the symptoms returned; she was admitted again, relieved, but died suddenly six weeks after her re-admission; a death explained by the enormous dilatation of the heart, and an aneurism of the substance of the

left ventricle, immediately below the mitral valves. A very curious appearance was found in the right ovary; a collection of serous fluid, about the size of a large pea, contained in a delicate membrane, of an elongated oval form, was found arising from the coats of the ovarium; at its origin having a communication with the internal structure, and appearing exactly as if it had escaped from thence; to the other end the fimbricated extremity of the fallopian tube adhered. It appeared to me that a Graafian vesicle had burst; that, not having freed itself entirely from the coats of the ovarium, it could not pass into the fallopian tube, but remained embraced by that organ, and underwent a partial development." 44.

By far the most common form of ovarian disease, however, is the conversion of this organ into numerous cysts, which, when containing fluid, is termed ovarian dropsy. Under this denomination have been included simple serous cysts, formed in the broad ligaments and fallopian tubes.

"All these confounded together under the name of hydatids, are distinguishable from the latter, by being nourished by vessels supplying them from the parts in which they are formed, vessels to which the name hydatid is attached being nourished by their own blood-vessels, or, in other words, having an independent life. Occasionally one or both ovaria are converted into simple cysts; the whole of the cellular substance and vesicles disappearing, that which was the fibrous coat of the ovarium becoming the fibrous coat of the cyst." 45.

The first and simplest form of the disease, is an enlargement or alteration of the corpora Graafiana. At an advanced period of life, on cutting into the ovarium, one or more of the Graafian vesicles are found dilated, and these bodies, generally the size of a millet-seed, become as large as an almond—are filled with limpid fluid, and their internal membrane becomes very vascular. Occasionally they enlarge to a greater degree, and always on the side nearest the proper coat, which often becomes distended to an enormous size. In this way, it appears to Dr. Seymour that a large single cyst, with a fibrous covering may be formed—and this, he thinks, is the simplest form of ovarian dropsy, the internal membrane secreting a prodigious quantity of fluid. The same opinion is entertained by M. Cruveilhier. One or two of the Graafian vesicles undergo this change, when the disease consists of one or two cysts filled with fluid.

"A married woman, æt. about 60, was admitted into St. George's Hospital in September, 1828, in order to undergo the operation of tapping for the third time in five years, rendered necessary in consequence of the sufferings she experienced from the pressure of the tumour. About sixteen pints of ropy albuminous fluid, of a chocolate colour from admixture of blood, were drawn off. The patient, whose health was much broken, did not rally after the operation; and she died, as is often the case, not from inflammation occurring after the operation, but with symptoms of exhaustion, a week from its performance.

On opening the body, a large fibrous cyst was visible, pushing forward the broad ligament as far as the fundus of the uterus; and on the opposite side, expanding into a sac, which reached nearly to the epigastrium, and contained several pints of coffee ground fluid. At the inferior part of this sac were the remains of the ovarium, very much shrivelled and imperfect on the surface internal to the cyst. It appears to me that this is a specimen of the cyst which I have endeavoured to describe; an enlarged vesicle, such as we often see in its earlier stage, pushing forward and gradually dilating the fibrous coat of the ovarium, the remainder of the ovarium remaining attached to the inferior portion of the cyst." 47.

It is to this form that the name encysted dropsy is strictly applicable, and

is the disease which exists so many years without much distress, furnishing, by tapping, such wonderful quantities of fluid. Much solid fibrous structure is occasionally connected with these collections; but more of this hereafter.

"The ordinary symptoms attendant on ovarian dropsy are very various, and by no means severe, and are limited principally to the effects of pressure on neighbouring parts. Where the increase of the disease is slow, the patient often suffers no other inconvenience than from swelling of the leg on the side on which the tumour is largest, or from the unsightly bulk of the abdomen, which she is unable to conceal. Patients have lived in this manner thirty or forty years, with a very considerable enjoyment of the comforts of life, and even the pleasures of the world, the accumulation of fluid rendering it necessary from time to time to perform the operation of paracentesis. In cases of this kind, symptoms dependant on unusually rapid increase of bulk, or pressure on any particular organs in the abdomen, occur. Thus heartburn, vomiting, and purging, difficulty of passing urine, or violent and severe head-ach, are met with, which are entirely removed if the bulk of the tumour be reduced. There is a case now under the care of Mr. North, of Berkeley-street, where the patient has for many years been unable to pass her urine, except by the daily use of the catheter; and this appears to arise from the natural situation of the bladder being altered by pressure, and perhaps by the adhesion of the tumour." 49.

When both ovaria are diseased in this way, the catamenia are always absent—when only one is affected, they are irregular or defective.

"In many cases the diagnosis of this disease is sufficiently easy. Pain has been felt in either iliac region, succeeded by a tumour, which can be traced below into the pelvis, and the uterus is found on examination dragged upwards by the morbid growth. The history likewise assists us; it has followed mis-carriage or delivery; at other times it occurs in females where pregnancy is out of the question, or at a time of life when it is impossible, and yet where the unbroken health renders ascites a very improbable occurrence. Occasionally, however, independently of its complication with pregnancy, it is difficult to distinguish this disease from secretions of the peritoneum with effusion, and still more so from ascites, the result of visceral obstruction; often also it occurs together with ascites.

"It appears to me that the following is one cause of the mistake of ovarian tumours (in which some of the cysts, or the whole cavity, is filled with fluid, the parietes consisting of solid matter) for ascites with visceral obstruction. It often happens that the increase of the ovarium is low at the commencement, and extends by a narrow neck into the abdomen before it is perceived: adhesions take place between it and the neighbouring parts, and from that time the increase of its growth is rapid. Hence, in some cases, the patient persists in having first perceived it in the right or left hypochondriac regions, and the solid portions give to the touch the feeling of enlargements of the spleen and liver, when, if ascites be also present, the combination is very perplexing." 50.

When ascites is present, a different feeling is communicated to the hand on striking the abdomen, whether in front or on the hypochondria. When in the recumbent posture, the fluid gravitates, in ascites, into the hypochondria and lumbar regions—in encysted dropsy, the fluctuation remains circumscribed. If there be much air in the intestines, as well as fluid in the peritoneal cavity, the fluctuation will be much more sensible in ovarian tumour than in ascites.

"And in more cases than one most experienced practitioners have been surprised at the flow of the albuminous dark-coloured fluid of encysted dropsy, during the operation of tap-

ping, instead of the transparent serum of ascites, which the very sensible fluctuation had led them to expect. Indeed, on striking the abdomen in encysted dropsy, the fluid often appears as if only separated from the hand by some very thin medium, and this sensation has occasionally led to the operation of paracentesis, when no fluid has followed the introduction of the trocar." 52.

Although this disease continues, in general, through life, there are a few instances on record, where adhesions have taken place between the distended cyst, and the colon, through which a quantity of offensive fluid has passed off by stool, with ultimate recovery. In other instances, the discharge has made its way by the vagina, and could be accelerated by pressure. Even a spontaneous rupture of the abdominal parietes at the umbilicus has given exit to the contents of an encysted dropsy. Various sudden and mysterious terminations of this disease are recorded; but they are, at best, suspicious, and, at all events, so much out of the ordinary course of Nature, that they cannot be taken into account in practice.

Scirrhus of the Ovarium.

This is a vague term applied to various diseased states of the ovarium. In a comprehensive meaning it represents equally the degeneration of the ovarium by age, and its enlargement by the deposition of any solid structure. It is often applied to that form of ovarian disease in which a portion of the tumour is solid, and a portion made up of cysts filled with various kinds of secretions. Dr. Seymour here restricts the term to that form of the disease characterized by Dr. Baillie in the following words:—

"The ovarium (says he) is much enlarged in size, and consists of a very solid substance, intersected by membranes, which run in various directions. It resembles exactly in its texture the tumours which grow from the outside of the uterus, and I believe has very little tendency to inflame or suppurate." 58.

The ovaria are rarely affected in this way. A very remarkable specimen fell under the notice of Dr. Robert Lee, one of the most industrious and rising physician-accoucheurs of this metropolis.

"*August 9th*, 1828.—'At Blandford Mews I opened the body of a woman upwards of seventy years of age, who had died, after long suffering, from a tumour in the hypogastrium, with ascites. An induration was first perceived in the abdomen, between the navel and right ilium, nine years ago, after she had suffered considerably for some months from sense of weight and dull pain in this situation. The size of the tumour gradually increased, and about eight years ago (the belly being greatly distended with fluid,) the operation of paracentesis abdominis was performed by Mr. Blagden, and several pints of water were drawn off. In the course of the succeeding years the operation was frequently repeated; but the quantity of fluid evacuated gradually diminished, whilst the large indurated moveable mass came to occupy the whole of the lower part of the abdomen. She sunk gradually, from the interruption to the circulation caused by the tumour.'

"*Sectio Cadaveris.*—'On opening the abdomen there was found attached to the fundus uteri, on the right side, an ovarian tumour, weighing seven pounds, of a dense and fibrous structure. Several large cysts, containing a fluid varying in colour and consistence, adhered to the upper surface of the tumour. The peritoneum, in contact with its anterior surface, was converted into a cartilaginous substance, about a quarter of an inch in thickness. In the proper tissue of the uterus, at its fundus, was observed a fibro-cartilaginous tumour, about the size of a large orange. In other respects the uterus was healthy." 59.

These scirrhous tumours are said never to ulcerate, though continental pathologists frequently apply the term cancerous ulceration to them. There is, however, in the College of Physicians, a specimen of this rare disease preserved by Dr. Baillie. It is a section of a scirrhous ovarium, resembling that of a scirrhous testicle, and beginning in various places to soften down.

MALIGNANT OR FUNGOID DISEASE OF OVARIUM.

"The formation of the next, or most complicated forms of ovarian tumour, is very difficult to explain. They consist, first, of numerous cysts, with more or less fluid contents, sometimes with bony or earthy matter contained in them; often a fatty secretion, resembling lard; sometimes penetrated with long fine hair, without bulbs; but more frequently filled with albuminous secretion of varying tenacity and colour. Sometimes these secretions resemble gruel in appearance: there is often matter like soot mixed with the fluid. At other times the secretion is the colour of mahogany, from admixture of blood; and not unfrequently the liquid evacuated from one of these cysts, by the trocar, resembles, in consistence and colour, the medicine well known under the name of Griffith's mixture.

"2dly. A single large cyst springs from the ovarium, and contains within it tumours varying from the size of a pin's head to that of an orange. Sometimes the great portion of the parietes of the cyst consists of tumours growing between the external and internal, or secreting coat, the interior of the cyst having the tumours projecting into it, being filled with fluid secreted from the serous lining. The tumours, when cut into, present a semi-fluid gelatinous substance, with white bands running through it, between which bands are smaller cysts, containing the same viscid glue-like matter." 61.

The generative organs are peculiarly liable to the latter form of malignant disease. The testicles in man, the mammæ and ovaria in women, are its frequent seats. These malignant forms generally make a rapid progress—seldom lasting more than a few years at most—often terminating fatally in a few months. Cancer of the stomach is more slow than fungoid disease of the ovaria. The existence of this terrible complaint may be known in the living body by the want of nutrition and broken health of the patient—the unevenness and rapid growth of the tumour—the simultaneous enlargement of glands in other parts of the body—and the occasional occurrence of lancinating pains in the swelling. The pulse is usually quick and feeble—hectic fever arises as the disease advances—and there is an inexpressible sense of debility.

Our author here adverts to the pathological views of Drs. Baron and Hodgkin, in respect to the formation of these tumours.

"Dr. Baron, following some rather indistinct views brought forward by Boerhaave and De Haen, conceived that the tumours we have just been describing were hydatids, whose contents became more or less inspissated by time, and whose coats underwent changes of different degrees of density, from simple thickening to cartilage. The contents became coloured also, by the rupture of blood-vessels: and, by this simple view, he accounted for all the various secretions with which these tumours were found filled. For the sake of avoiding argument as to the independent life of hydatids—argument quite unnecessary, as Dr. Baron thinks, to the pathological reasoning—in his last publication he has substituted the word vesicle in their place, as being liable to no such cavil.

"Dr. Baron ascribes the formation of these vesicles to a change in the lymphatics of the part; the extremity of a lymphatic being closed, and thus forming, when distended with fluid, a pyriform vesicle, or the vesicle being formed at the intersection of numerous

lymphatic vessels; of course this latter occurs oftener in the parenchyma of a viscus than on the surface. He applies this reasoning in detail, to account for the formation of tumours in every part of the body. A practical observation is derived from the experiments of Dr. Baron, which may lead to important results,—that what we call malignant disease (cancer, fungus hæmatodes, medullary tubercles,) may be produced in any animal by bad nutrition, arising from bad air and confinement. These conclusions of Dr. Baron can be strongly corroborated by my own experience. In the course of last summer, I was employed in dissecting several animals which died in the menageries of this city, principally with a view to the physiological observation in the first chapter. Almost without exception animals of the classes mammalia and birds died of tuberculous disease, affecting all the viscera of the body. The tubercles were principally of the kind which we call tubera circumscripta, and which have received in the French school the name of 'encephaloides,' and are found often affecting internal viscera, when cancer affects the glands or extremities. Seclusion in close cages, bad ventilation, and a want of their natural food, had produced this result. Does not this lead to the conclusion, that free air and nutritious diet, with an approximation to natural habits, is the course most likely to save those who are attacked, among our own species, by tuberculous disease?

"Dr. Hodgkin's views, that encysted tumours of the ovarium, as well as malignant tumours, arise from the developement of serous cysts, have a considerable similarity to those of Dr. Baron. Dr. Hodgkin's labours are not yet entirely before the public; it is therefore improper to comment long on them. They are well worthy, and will doubtless receive, the attention of the profession. Dr. Hodgkin, as far as our present subject is concerned, conceives that a large cyst, which he calls the superior cyst, is first formed, from the inside of which tumours grow, of different sizes and shapes, pushing up the internal membrane of the superior cyst, which is reflected over them, as the pericardium and pleura are in the natural cavities of the body, lined with serous membranes. These secondary cysts contain smaller. Sometimes these smaller grow so fast as to strangulate one an other, and the death of some of them causes altered appearances in the secretions of the parts. Sometimes they burst through the reflected membrane, and present a fungoid and fringed appearance, which may be seen in preparations in most collections of morbid anatomy.

"These views are very clearly and scientifically expressed in Dr. Hodgkin's paper: they do not, however, go to the extent of explaining the constitutional origin of the disease. In this respect Dr. Baron has gone further, referring these changes to disease in the absorbent system." 66.

Dr. Seymour next details some cases of this malady—some of which had been under his own care, others in the hands of his friends or acquaintances. The cases are illustrated by beautiful plates.

We shall glance at two or three of these cases.

Case 1. This was a lady, æt. 30, who was delivered of her third child in June, 1827. In the following September she first perceived a tumour in the left hypochondrium, unaccompanied by pain or inconvenience. Suddenly, in November, the whole abdomen became distended—and, on examination, a solid tumour was found to occupy the whole left side of that region, while a considerable fluctuation was perceptible in the right. The patient was unable to lie down in bed, or on either side. The pulse was quick and feeble—there were evening accessions of fever, followed by profuse perspirations—scanty urine—total loss of appetite and sleep. Many eminent physician and surgeons of London visited the patient, and many different opin-

ions were given. The spleen was suspected. Paracentesis was performed, and 22 pints of ropy fluid were drawn off, with considerable temporary relief. The operation was obliged to be repeated month after month, the solid structure constantly increasing in size. One of the incisions was burst open by the distending force ab interno, and two or three pints of a puriform fluid daily escaped, with temporary alleviation of suffering. But the patient was worn out, and died in the succeeding May.

DISSECTION.

"A large tumour occupied the place of the left ovarium, and filled the cavity of the pelvis, and great part of that of the abdomen. It was completely adherent to the front and left side of the abdominal parietes, and to the back part also on the left side, nearly as far as the vertebræ, the muscles being very thin, and having partly begun to assume the same appearance of malignant disease which the tumour itself possessed. Great part of the tumour was solid, being composed for the most part, of transparent white gelatinous substance, with membranous partitions, containing a number of globular cysts filled with the same jelly; some others with thin transparent fluid; and one or two portions of the tumours being yellow, and harder in consistence. The greater part of the solid tumour was situated on the left side, close to the parietes, and extended from the pelvis to the ribs: but masses of the same appearance, and varying in size from that of an orange to a pea, were scattered around the principal cavity which had been tapped, and which was filled with thick purulent fluid. The whole of the external surface of the cyst and of the tumours was smooth and uniform; but the internal surface was very irregular, from the projection of these numerous globular portions of tumour into the interior of the cavity; and this internal surface was in a very vascular state, while sections of the tumours exhibited very few vessels. The inflamed appearance of the principle cavity was much greater than is usually met with in the malignant disease of the ovarium.

"The peritoneal surface of the cyst, and that of the contiguous intestines, were much inflamed, and covered with masses of recent lymph, and the cavity of the peritoneum contained a few ounces of serum; but, except at the lower part, and where it was thus in contact with the cyst, the inflammatory appearance of the peritoneum was inconsiderable. The abdominal viscera were raised by the tumour high within the chest, and pushed across to the right side and upper part of the abdomen, but were otherwise healthy. The right ovarium was much enlarged and hardened, but did not present any appearance of malignant disease." 70.

The next case is one for which our author is indebted to Dr. Henry Davies.

Case 2. "In October 1828, Dr. Davies was called to see Mrs. J. æt. 45, of a full habit, sallow complexion, complaining of violent pain across the loins, with copious watery discharge from the vagina. These complaints had existed eight months; but she had felt a degree of uneasiness in the region of the uterus nearly four years. The catamenia had ceased nearly a year before the present visit; bowels regular, pulse 76 to 80, urine free. On examination per vaginam, the os uteri was not tender to the touch, but the uterus was enlarged anteriorly. She was much relieved by local abstraction of blood, mild aperients, narcotics, and the tepid bath, during two months. On the 17th of December she was attacked with violent and excruciating pain of the back, inferior part of the abdomen, and internal parts. The uterus was much increased in size, os uteri very sensible to the touch, and somewhat open.

"On the 28th December, and 18th of January, consultations were held on the case, the result of which was, that the uterus was enlarged either throughout its substance, or some body within distending it. The os uteri being distended, the orifice half an inch in diam-

eter, and the cervix uteri obliterated, the tumour was not so hard as carcinoma, nor so firm as fleshy tubercle. The question then arose whether it was polypus, or medullary sarcoma?

"At the end of January the patient was seized, after an interval of tranquillity, with most excruciating pain, accompanied with violent expulsatory efforts. Several lumps were discharged from the vagina, small portions of which remaining, presented a ragged appearance, somewhat fleshy.

"After this the uterus became much diminished in size; the os uteri regained its natural state, and was by no means so sensible to the touch; but a tumour was now found, on examination, apparently external to the uterus and posterior to it, between the uterus and sacrum, in the recto-vaginal septum, rather more than an inch above the cervix uteri, of a nodulated shape, covered by the membrane of the vagina. The report on the 17th February was, that she had had one violent paroxysm since the last report; pulse 84; bowels and urine regular; discharge less offensive; pains less frequent. On the 25th the tumour posterior to the uterus was much enlarged, projecting below the os uteri, which appeared puckered. The tumour is now perceptible above the brim of the pelvis, its apex, in the left iliac and inguinal regions. The patient has lost flesh, and the complexion is still more sallow. In March the tumour was enlarged, and apparent above the brim of the pelvis, at the right groin. In June, having been to the Bank on urgent business, on her return the patient was attacked with rigor, followed by severe abdominal pain; the third day after which she died.

"*Sectio Cadaveris.* The immediate cause of death was an attack of enteritis. The parietes of the abdomen were fat; and the omentum loaded with fat, and adherent, by its inferior edge on the right side, to a tumour. On removing the omentum, the intestines were found much distended with air, glued together by effusion of lymph, and about three pints of whey-coloured serous fluid in the cavity of the abdomen. The uterus was enlarged, and its fundus situated above the brim of the pelvis, in the left inguinal region: the left ovarium and fallopian tube sound; the right merged in the tumour. Under the peritoneal coat, near the fundus, several fibro-cartilaginous tumours were found, of a dense structure and yellowish colour. Occupying the right iliac and lumbar regions was a large tumour, with an irregular and lobulated surface, varying in colour from a light red to nearly black. It adhered to the caput coli and all the adjacent parts, filling nearly the whole of the pelvic cavity, passing behind the uterus, between the rectum and vagina, forming a projecting tumour in the vagina, pressing the uterus upwards and forwards towards the left side. This irregular mass, when cut into, and which appeared originally to be formed of the right ovarium, presented a great variety of appearance, of which it is difficult to convey an accurate idea. In some parts there were irregular-shaped cavities, containing a soft matter, having the appearance and consistence of brain, in some parts of gelatinous consistence: no part appeared organized or cartilaginous. When the soft matter was washed away, a large mass of fibrous matter, similar to that on the uterine surface, remained. On opening the uterus the os uteri was found entire, but soft and altered in structure: the cavity of the uterus contained a quantity of dark ash-coloured purulent fluid. The whole original texture of the uterus was diseased, a ragged fibrous substance, of fungoid growth, springing from its surface throughout. Several small fibro-cartilaginous tumours seemed growing also from its inner surface. The original fungoid growth which the uterus contained had been expelled from time to time, which afforded momentary relief from the occasionally insufferable pain which the patient endured." 74.

Case 3. Margaret Webb, æt. 52, was admitted into St. George's Hospital on the 11th June, 1829. She had had no evacuation from the bowels for more than a month. On examination per vaginam a tumour was found,

about the size of an orange, adhering to, and external to, the upper part of the vagina, so pressing on the rectum as to render the passage of a gum elastic tube very difficult, and the ordinary administration of an enema impossible. Two months previously she was attacked with severe pains in the right hypogastric region, which still continued. The constipation had been gradually increasing for two years. The countenance was pale and sallow—pulse quick and weak—tongue furred. Mr. Babington endeavoured to return the tumour, conceiving it to be the ovary. Some adhesions gave way, and the tumour receded out of reach. One of the small cysts, however, gave way, and its contents were extravasated into the abdominal cavity. Inflammation followed, and terminated fatally.

"On opening the body, the peritoneal covering of the bowels was seen much inflamed, and the convolutions of the intestines glued together by recently effused lymph. The upper portion of the intestines were greatly distended by fæces. Opposite the commencement of the first lumbar vertebra, the great intestine was found much thickened, to the extent of nearly three inches; and at the centre of this thickened portion the cavity was so entirely obliterated that even fluid could not be made to pass through it. The internal surface of the thickened intestine was partially ulcerated. On examining the uterus, the right ovarium was found changed into a mass of soft matter, not very dissimilar to the substance of the brain. This matter, more or less fluid, was arranged in cysts; one of which having given way, in the endeavour to restore the ovarium to its natural position, had poured out its contents into the peritoneal cavity. The tumour had adhered to the posterior and inferior part of the fundus uteri, by the opposite peritoneal surfaces, thus forming the tumour felt on examination per vaginam." 78.

We must now dedicate a few pages to the subject of treatment.

We are glad to find our talented author speak confidently on this point. "If, after considering *seriatim* the diseases of this organ, we proceed to seek for remedies for its various affections, we shall find that we possess very powerful means of subduing disease, and still more effectual ones of calming and alleviating the distress arising from an acknowledged incurable state." Dr. S. hopes, and so do we, that medical men will not give up their whole attention to the investigation of diseased structure, but allot a portion of it to the search after remedies.

We need not dwell on the treatment of acute inflammation of the ovaria, which is the same as for a similar inflammation in any other part. Local depletion and perfect quietude are the essentials. In simple encysted dropsy, the excitement of the urinary and other secretions or excretions has not the beneficial effects that are found to result in ascites or anasarca. But where general effusion into the peritoneal cavity has occurred, the increase of such secretions are useful. The infusion of pyrola umbellata is much recommended by Dr. Seymour—a pint daily. To emetics, as promoting absorption, Dr. S. seems partial, and relates some curious cases of the surprising removal of glandular swellings by the operation of vomiting. These we need not detail.

"It is obvious that the sweeping objection which would exclude bloodletting in this disease, must have arisen from misunderstanding its pathology; when accumulation of fluid or growth are proceeding rapidly, when there is a quick pulse, irregular heat of skin, and acute pain in the part, it is obvious that inflammatory action is going on within the cyst, and will probably eventually be extended to the neighbouring peritoneum; the fluid secreted is mixed with shreds of lymph, or thickened by the diffusion of purulent matter;

under such circumstances the use of the lancet is employed with much benefit. Even when great depression of vital power has apparently existed, the relief obtained has been very great, and similar to what is experienced in inflammation of an acute nature, when seated in other serous membranes. The pulse has risen in force and diminished in frequency under the flow of blood; the crassamentum has been unusually firm, and the buffy coat very distinct on the coagulated blood. The oppression under which the patient laboured has vanished under the repetition of the treatment; and although the disease has been by no means cured, the strength of the patient has been saved, and she has perhaps been brought into the situation in which paracentesis may be employed without risk. It is in such cases that mercury is useful, and as in other inflammatory diseases these remedies appear to be nearly similar in their effects, one diminishing, the other altering vascular action. The comfort experienced after such loss of blood, by the administration of opium, is certainly equal to, if not greater, than that which occurs in inflammation affecting vital organs, and seems to realize the feeling and almost poetical expression of the late Dr. Currie, of Liverpool: 'The patient sinks into a sleep, which is ill exchanged for the realities of life.'" 96.

Moderate purgation, by removing flatulence and fœcal accumulations, is useful; but hypercatharsis is distressing, and may prove dangerous by breaking one or more of the cysts in the act of straining.

Morgagni, and many others since his time, appear to have entertained great reluctance towards the operation of paracentesis. But the moderns have lost all dread of this kind. Our author steers a middle course—the "auream mediocritatem"—avoiding a too early recourse to the trocar on one hand—and a too fastidious delay of surgical aid on the other, by which the patient is subjected to a painful, almost unendurable distention.

"Two methods have been proposed then for emptying the cyst, and for promoting its entire contraction.

"1. A considerable incision, in order to empty the cyst entirely of its contents, leaving in a canula or bougie, to excite contraction of the cyst, and prevent the re-collection of fluid.

"2. Injections into the cyst.

"For the first method of practice it has been urged, that operations on the abdomen, although dangerous, are by no means fatal; and the cyst often containing matters of various tenacity, these contents will not escape through an ordinary canula.

"A very remarkable instance of the application of this practice, and a very strong proof of the impunity with which operations conducted with considerable roughness may sometimes be successful, is contained in the 33d vol. of the Philosophical Transactions, by Dr. Houston, more than a century ago. This was the case in a woman, æt. 58, of an ovarian tumour of 13 years duration. I subjoin the account of the operation in his own words:—

"'The operation of puncturing the abdomen being proposed, she consented. Accordingly, with an imposthume lancet, I laid open about an inch; but finding nothing issue, I enlarged it two inches, and even then came nothing forth but a little thin yellowish serum, so I ventured to lay it open about two inches more. I was not a little startled, after so large an apperture, to find only a glutinous substance bung up the orifice. The difficulty was, however, to remove it. I tried my probe, and endeavoured with my fingers, but all in vain; it was so slippery that it eluded every touch, and the strongest hold I could take.

"I wanted in this place almost every thing necessary, but bethought me of a very odd instrument, yet as good as the best in its consequence, because it answered the end proposed. I took a strong fir splinter, such as the poor in that country use to burn instead of candles; I wrapped about the end of the splinter some loose lint, and thrust it into the

wound; and by turning and winding it, I drew out above two yards in length of a substance thicker than jelly, or rather like glue fresh made and hung out to dry; its breadth was about ten inches. This was followed by nine full quarts of such matter as is met with in steatomatous and atheromatous tumours, with several hydatids, of various sizes, containing a yellowish serum, the least of them larger than an orange, with several large pieces of membranes, which seemed to be parts of the distended ovary. I then squeezed out all I could, and stitched up the wound in three places.'

"This patient recovered and lived fourteen years afterwards, without any return of the disease." 101.

The next operation of this kind is recorded in the memoirs of the Royal Academy of Surgery, Paris. The celebrated Le Dran was the operator. He made an incision into the tumour, and left the trocar in the wound, through which he injected mild fluids. The patient survived the operation four years, with a fistulous opening, which never entirely closed. In another similar operation, the canula was left in; and, at the expiration of two years the fistula closed, and the patient recovered. Mr. Key, of Guy's Hospital, has tried this plan in three instances without success. The following are his words in a communication to Dr. Seymour.

"'I find notes of three cases in which the instrument was left in after tapping an encysted dropsy. The issue has not been such as to lead me to expect much from the plan. One case was favourable for the treatment, as the fluid was of the serous character. The two others contained a fluid of a much thicker consistence; in one it resembled mucilage, in the other a dark coffee-ground fluid. Case 1. A strong and otherwise healthy woman, æt. 42, single. Dropsy of four years standing. Twenty-seven pints drawn off, resembling straw-coloured serum; no inflammation followed. In two months fluid again collected; tapped; and twenty-one pints of same character removed. A piece of elastic gum catheter left in, but closed; for three days pain, but not considerable; slight febrile symptoms; on the third day plug withdrawn, and a few ounces of turbid serum removed. Experienced relief The same operation repeated on the 9th, 13th, and 18th of May. At each successive operation the fluid assumed a more turbid and inspissated character, shewing the progress of inflammation. At the last she began to complain of so much general tenderness, and so much fever excited, that I was induced to comply with her request to withdraw it. The treatment certainly retarded the formation of fluid, for I had not occasion to tap her for six months afterwards, when the fluid was found to be of the serous kind, containing a few flakes of lymph. The medical treatment consisted in mild purgative remedies.

"'The second case is that of a female, æt. 33, having had ovarian dropsy for two years and a half; the tumour solid in some parts, with a large cyst on the right side; the health impaired of late as the tumour increased. The bougie was introduced after tapping; the fluid drawn off was of the mucilaginous kind, of a light brown colour. On the third day she complained of great pain across the scrobic cordis, which was relieved by fomentations. On the fifth day pain returning, with sickness and febrile pulse, I thought it advisible to take out the bougie. The fluid again collected after a short interval, and was removed; it retained the same character. This patient died out of the hospital in a year after; and, on inspection, the ovarian tumour was divided into several cysts of various sizes, with tense fibrous septa.

"'The other case was a delicate young married woman, without children, exceedingly florid complexion, and of but little constitutional power. The fluid was of a dark reddish coffee-ground colour, about seventeen pints in quantity. A piece of elastic catheter was left in after the operation; obliged to be withdrawn on the following day, in consequence

of the severe constitutional irritation which followed. The fever and tenderness of the belly increased for four days, and an abscess formed between the peritoneum and integuments, which burst at the opening made by the trocar. Under the continued suppuration she sank; and not being allowed to inspect her, we could not ascertain if the abscess communicated with the cyst; of this, however, we had strong suspicion.'" 105.

In the true scirrhus of the ovarium our author is unable to point out any remedy that can be relied on. Mercury, iodine, the caustic alkali, conium, and muriate of lime, have all been employed for the removal of morbid growths—but not with very great success. Dr. Seymour descants on the power of mercury in dissolving adhesions resulting from inflammatory action, and then adverts to dropsy, as so often dependent on disorganization of the heart, liver, lungs, or kidneys.

"If this disorganization has long existed, if the inflammatory action which produced it has entirely ceased, then perhaps will the employment of mercury be found worse than useless, diuretics and purgatives, according to the circumstances of the case, affording the best chance of relief; but if the case be recent, and inflammation, in a more or less acute form, is going on, many a patient has his life prolonged by the administration of mercury, combined with venesection and the use of the salts of potass." 108.

On these principles the beneficial employment of mercury is limited to those cases in which vascular excitement has immediately preceded the enlargement, and still continues, in which case its growth may be entirely stopped, and the already formed increase of bulk diminished.

"It must be remembered also, that ovarian tumours sometimes increase rapidly, and by pressing on neighbouring parts produce inflammation of surrounding textures; where such inflammation ensues, the employment of mercury will be found useful, for at this time the blood drawn will be found covered with buffy coat. The membrane which lines these cysts we have seen is nearly allied in structure to the natural serous membranes of the body; it likewise is often attacked by inflammation after tapping, or from external injury. Here again mercury is useful, and will restrain even more powerfully than venesection the progress of the mischief." 109.

Excepting under the foregoing circumstances, Dr. S. thinks that mercury can be of little or no use—perhaps of disuse. Dr. S. then takes up the consideration of iodine. After adverting to the injurious effects of this medicine, when incautiously administered, he relates the following case communicated to him by Mr. Brodie.

"'I have employed iodine as an internal medicine in a great number of cases of morbid growth, without any manifest effect arising from its exhibition. In two cases, however, and in two only, it was productive of the greatest benefit, effecting that which I could scarcely have supposed that any medicine was able to accomplish.

"'In one of these cases, which I attended with Mr. Pennington, the patient laboured under a tumour on one side of the tongue, and imbedded in its substance, of about the size of a nutmeg, of an irregular form, hard to the touch, and having a well-defined margin. The disease had existed between one and two years, gradually making progress; and it had resisted the internal use of arsenic, as well as a course of sarsaparilla, combined with oxymuriate of mercury. As the surface of the tongue was furred, and there were some other symptoms which seemed to indicate a deranged state of the digestive organs, we

prescribed, in the first place, the pilula hydrargyri, with a gentle aperient, and a light bitter with soda. Under this treatment the tongue became clean, but there was no perceptible alteration in the local disease. We then administered the tincture of iodine three times daily in moderate doses, gradually increased. In a fortnight the tumour was evidently smaller, and at the expiration of about eight weeks it had nearly disappeared. The patient was sent into the country, being directed to continue the use of the iodine for some time longer. This was upwards of four years ago, and I have not seen the patient since; but I have been informed that the cure is complete.

" 'The second case was that of a man who was admitted into St. George's Hospital on account of a tumour, situated on one side a little below the axilla. It was of the size of a small orange, unattended by pain, and bearing no other marks of inflammation, and quite moveable beneath the skin. Having removed it by the knife, I found, on making a section of the tumour, that it was composed of a brown solid substance, of a firmer consistence, and to all appearance more highly organized than fungus hæmatodes, and of an uniform structure throughout, except that externally it was covered by a thin membranous cyst closely adhering to it. Sometime afterwards the same man applied at the hospital a second time, having two tumours on the neck, each of the size of a double walnut. These bore no resemblance to the common enlarged glands which occur in this situation, and so exactly resembled that which had been removed from the side, that no one entertained a doubt as to their being exactly of the same nature.

" 'Conceiving that there were some obvious objections to a second operation for the removal of a disease, so manifestly depending on a constitutional cause, and knowing nothing better to be done, I prescribed the tincture of iodine to be taken internally. Under this course of treatment, which was continued for several weeks, the tumours gradually diminished in size, and ultimately disappeared. I have heard nothing of the patient since; but as I told him that he should be received into the hospital again whenever he applied for that purpose, I think that in all probability he has had no return of his complaint.

" 'I have no right to say, that in these cases the tumours were of a malignant nature; at any rate, they were not malignant tumours of the worst kind. I have, however, exhibited the tincture of iodine in many cases of truly malignant disease, and in a few instances, as it appeared, not without some temporary advantage. For example, I was consulted concerning a lady who was supposed to labour under a tumour of the breast. I found, however, on examination, that the breast itself was in a healthy state; and that in this, as in some other cases which have fallen under my observation, the apparent enlargement of the breast was the consequence of its being elevated by a tumour beneath it. The tincture of iodine was given internally, and under its use the tumour became so much reduced in size, that I had the credit with the patient and her friends of having cured an obstinate disease. The amendment, however, was of short duration. Soon after discontinuance of the medicine, the tumour began again to increase in size; and the iodine, which was a second time administered, had now no dominion over it. The patient ultimately died; and on inspecting the body, it was ascertained that there was a medullary or fungus tumour, which had its origin in one of the ribs below the breast and pectoral muscles. The same disease existed also in other parts of the body.' " 115.

A remarkable case is next detailed by Dr. Seymour himself. A female, aged 31, was admitted into the Asylum of Health, under Dr. Badeley, in March, 1827. A large tumour could be traced into the pelvis, and occupying the whole right side of the abdomen. It was hard to the touch, irregular, and conveyed an obscure sense of fluctuation. It had existed 18 months. The health was tolerably good. The tincture of iodine was exhibited for

two months, gradually increasing the dose to 20 drops twice a day, with external frictions of the same. The tumour appeared to grow gradually smaller, and, at length very violent constitutional symptoms came on, viz. tremblings, great distress of mind, and lowness of spirits, to which succeeded signs of internal suppuration—a very quick pulse, brown tongue, rigors, profuse sweats. At the expiration of a fortnight the patient began to pass purulent matter by the rectum and vagina, extremely fetid. This discharge continued for several weeks. She was now allowed generous diet and tonics. She was sent into the country, and returned in five weeks, her strength restored, and the tumour nearly gone. Six months after this she was examined by a celebrated physician-accoucher, who could discover no tumour. We believe, however, that this patient is now in St. George's Hospital in a very deplorable state.

Before quitting the subject of iodine, we ought to advert to the treatment employed and recommended by Dr. A. T. Thompson. This is the evacuation of the fluid from the cells by tapping, and then the steady administration of iodine. We believe it will be found that this potent medicine has a strong diuretic effect—at least we have seen this effect produced by it in a very marked manner, in ascites with enlarged liver.

"The third of the remedies which have enjoyed a high reputation as a deobstruent is liquor-potassæ. This medicine, employed in as large doses as the stomach will bear, appears to have been successful in discussing indolent scrofulous tumours, and those of a steatomatous kind. It is with diffidence that I offer any result of my own experience; but in diseases of a malignant nature, affecting internal parts, it has appeared to me to produce more alleviation than any other remedy with which I am acquainted. This applies principally to those tumours when they are not attended with acute pain, or any considerable symptomatic fever.

"Liquor-potassæ has been recommended in ovarian disease of the kind we are considering, and the general health appears often to have been greatly improved during its use; and the formidable disease itself is reported to have disappeared under its employment.

"The liquor-potassæ, in such cases, appears to act by inducing suppuration in the cysts, which is afterwards discharged after adhesions formed with neighbouring viscera. In this respect its action resembles that of iodine, and is contra-indicated when increased vascular action is present; hence it would appear to be most useful in those cases to which mercury is inapplicable; and, in fact, it is in the leucophlegmatic habit of body it appears to be most beneficial, whether as a curative or only as a palliative agent.

"Dr. Warren has favoured me with the account of a case which occurred under his care several years ago, in which this remedy was employed in very large doses, as large as the stomach could bear it, at short intervals. After some weeks, softening of the tumour took place, adhesion with the great intestine, an opening was formed, and much purulent matter united with other secretions of various consistence, such as are observed in these tumours, passed by stool. The swelling subsided, and the patient entirely recovered her health." 119.

Mr. Abernethy has strongly recommended a series of blisters, after the fluid has been drawn off, as a preventive of its re-accumulation. The muriate of lime has been much lauded by Dr. James Hamilton, of Edinburgh, in conjunction with "percussion of the tumour."

"Adverting, (says he,) to the effects of percussion and of pressure in chronic rheumatism, and knowing the influence of the continued use of the muriate of lime in indolent

glandular swellings, the author was led to the trial of those several means, as being at any rate perfectly safe. He advised, therefore, that moderate and equable pressuse of the abdomen should be made, by means of a suitable bandage; that the enlarged part should be subjected twice a day to gentle purcussion; and that a course of small doses of the muriate of lime should be continued for at least several months. Where pain or tenderness was experienced on the ovary being pressed upon, he recommended, in addition to the above means, the daily use of the warm bath.

"This plan of treatment has been much more successful than he had anticipated. In seven cases in which it was tried, the enlargement has so completely subsided that it is no longer tangible. There could be no mistake in the majority of these cases, not only because the size of the diseased ovary was very considerable, the fluctuation was distinct, and all the ordinary characteristics well marked, but also because the nature of the affection had been previously ascertained by the most experienced practitioners in London.

" 'In the first three cases the author considered that there might be some accidental coincidence independent of the remedies employed, and therefore he did not venture to allude to them even in lecturing, being always unwilling to give any hints which might lead to delusive speculations in the practice of physic; but the fortunate issue of four additional cases entitles him to presume that the above means of cure bid fair to prove extensively useful.'. 123.

The last measure—the ANCEPS REMIDIUM—is extirpation of the whole tumour. We have laid before our readers, on former occasions, all that is known of this formidable operation. We need not here reiterate them. The operation certainly has been successful, both in this country and on the Continent; but we are inclined to agree with the sensible author of the work under review, that—"the arguments against such an operation are numerous and strong, while the probabilities of success are very small."

We think that both the author and the reader will acknowledge that we have done ample justice to the work, by a faithful and extended analysis of its contents—an analysis that will travel through every region of the globe, and consequently experience a diffusion which the original can never hope to attain.

Periscope;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

LUNACY *versus* SANITY—LAW *versus* PHYSIC.

"Maxima inter has differentia; et tot doctorum sententiæ, quot ipsi numero sunt." *Avicenna.*

In the late remarkable trial of Mr. Davies for the crime of insanity, LAW has not gained; but PHYSIC has decidedly lost ground! And why should we wonder that the bar, the bench, the college, the jury should all wrangle, and dispute, and disagree about INSANITY, when they are all mad themselves!—Every body knows that CHARON, according to the testimony of Lucian,* was conducted by MERCURY to a very high hill, (Mont Blanc, or Chimborazo, perhaps,) from whence he had a view of all the nations of the earth. Charon eyed the immense prospect very attentively, and then Mercury, that witty chap, (Nepos Atlantis) inquired of him what he saw? The answer was, that he could discover cities like bee-hives, each bee having a *sting*—that the bee-men did nothing but *sting* one another—that over their heads hovered a tumultuous multitude of passions in the shapes of hope, fear, anger, avarice, envy, &c. together with innumerable diseases which they were always pulling down on their own heads! Some of the bee-men appeared to him to be brawling, some fighting, some running, some riding, ("solicite ambientes, *calide litigantes*") and contending for all manner of toys and trifles. In conclusion, he pronounced them all to be *madmen*, fools, and asses! "Insana studia (he exclaims) insani labores—mad endeavours! mad actions! mad! mad! mad!"

All our medical readers know that when Hippocrates was sent to see Democritus (as Dr. M'Michael was sent to see Mr. Davies) he received such sapient answers from the supposed lunatic (whom by the bye, he found dissecting animals to discover the *cause of madness*) that he declared to the citizens of Abdera that, notwithstanding some *small eccentricities*, "the world had not a wiser or more honest man than Democritus." So Dr. M'Michael wisely concluded that Mr. Davies' lessons in boxing were proofs of sanity, being very natural and proper precautions against the pugilistic propensities of the tea-dealers in Philpot-lane.

Why should we attach any weight to the testimony of a jury respecting the madness of others, when it is asserted, upon the very best ancient authority, that *we are all mad?*

"Et semel, et simul, et semper insanivimus omnes."

SOCRATES searched every where and could not find a wise man—and when we consider that every deviation from wisdom, judgment, sense, must be a grade, however small, of insanity,—when we reflect that the whole of the passions and propensities of our nature have a tendency, a constant tendency, to derange the mind—and not only the passions within us, but almost all the external circumstances by which we are surrounded, we shall on an accurate survey of human nature, and serious reflection on its state and condition in this world, come to the same conclusion as the ancient sages,

* Dial. Contemplantes.

that there is no man in his proper senses. It may not be useless or unentertaining, though a melancholy subject, to glance at some of the principal causes which produce, according to the degree of their intensity, an aberration, more or less marked, from a sane state of the intellect.

The IMAGINATION is constantly leading us into shades and grades of madness. How many chimeras are engendered by the force of imagination! How many golden day-dreams float along the sensorium, even in the murky atmosphere of Cornhill! How many golden mountains have been raised among the Andes, that had no other existence than in the imagination? Can those men be pronounced sane who have squandered away their fortunes and ruined their families on chimerical speculations—or those who were weak enough to entrust their property in the hands of madmen? What act of Mr. Davies' life was half so insane as hundreds of acts lately performed, not merely by individuals, but by whole companies of collected wisdom?

SORROW and GRIEF are designated the mother and daughter of melancholy. Hippocrates tells us that sorrow begets insanity, and insanity sorrow—that they tread, as it were, in a circle of production and reproduction. Solomon says that sorrow "dries up the bones"!

Tanta illi est feritas, tanta est insania luctus.

Fear, envy, anger, malice, hatred, emulation, jealousy, revenge, ambition, discontents, cares, misfortunes, and ten thousand other causes are perpetually operating to drive SOUND REASON from its just and proper path, and thus to effect more or less aberration of the intellect. Every ECCENTRICITY, as it is called, and as the term literally imports, is a divergence from sanity of mind. When these eccentricities are slight — harmless — droll, they only produce amusement to the rest of the community, and are not considered as insanity. But whenever any of the various causes above-mentioned happen to operate more powerfully than usual — or when bodily disorder comes to aid original obliquity of mind, then the eccentricity becomes more prominent; and when this aberration happens to interfere with the interests of others, a commission of lawyers and doctors is forthwith summoned, to try on which side of the line of demarcation between eccentricity and insanity, the individual is placed. Is it very wonderful that a junto of men, each having his own personal hobby, humour, eccentricity, *idola specus* — or, in other words, MONOMANIA, should be all at sea in determining the above-mentioned boundary, when the subject of the investigation is just hovering between the two ill-defined, and indeed indefinable regions?

The late memorable commission of lunacy, in Mr. Davies' case, collected together, in Gray's Inn Lane, the greatest number of madmen which we ever remember to have seen in any one place, if we except certain congregations at the FREE MASONS' TAVERN, a few years ago, when Mr. Wakley aspired to the elevated character of legislator, before he fell back into the humble sphere of church-warden in the parish of St. Giles. That the party who *prayed* for the commission, were as mad as the frogs who *prayed* to Jupiter for a king, might be proved by at least 5000 good reasons, which, ere now, are engrossed by the attornies in very legible, though perhaps not very intelligible characters! As for the lawyers on that side, they were decidedly *monomaniacal!* Excepting indeed on the single point of fees for themselves, they appeared to be in a state of general insanity. Who but madmen would have produced a "TRASH-SPOUTER," as Mr. Adolphus aptly termed him — a common hack-witness, who travels from county to county to dole out the jargon of Bedlam, within whose walls he was so long an inmate, for the purpose of forcing an offensive chewer of Souchong or Wang-quang tea, in Philpot Lane, to take up his abode in the "RETREAT" on Clapham-rise rather than on Crouch-hill! Who but madmen would have called before the commissioners, a physician who swore that it was *madness* in Mr. Davies to "lock up" five or seven thousand pounds

in a snug estate, although he swore, at the same time, that he knew not what was the amount of property possessed by the buyer of that estate! To our minds, and no doubt to those of the jury, the act of "locking up" five or seven thousand pounds, was a much stroner proof of sanity than the act of taking lessons in boxing, which Dr. M'Michael considered unequivocal evidence of sound mind. If Sir Charles Wetherell looked on this "*locking up*" propensity as *disqualifying* poor Davies for the management of his own affairs, why did he call as evidence, Dr. Burrows and Sir George Tuthill, who are themselves notorious for this same "*locking-up*" propensity; and who were, according to his own shewing, *disqualified* witnesses?

The lawyers on Mr. Davies' side, though they shewed themselves much less insane than their opponents, are not quite free from suspicion of intellectual obliquity. Many of Mr. Brougham's observations on the case were far from being wise, however witty they might appear. Who but a MADMAN would object to the testimony of "MAD DOCTORS," in cases of insanity? Is it not an established maxim, in jurisprudence, as well as in every other kind of prudence, to—"set a thief to catch a thief?"* Why then should Mr. Brougham have borne so hard on the "mad doctors"—and especially on the "*spouter of trash*," whom he pronounced to be past redicative of a disordered mind, till they came to a man who fancied himself to be JESUS CHRIST. The Barrister made a full stop, and seized the writer by the arm "Thank my stars," said he, glancing a look of ineffable contempt on the Priest, "I am free from those superstitious fears and visionary dreams by which the vulgar are kept in thraldom by designing knaves or ignorant enthusiasts! I worship the sun, the moon, the stars, the earth—in short, I worship NATURE, whatever form she may assume in the animal, vegetable, and mineral world around me, as well as in those orbs which shine resplendent in the heavens. I acknowledge no god but Nature."—At this moment, the Priest seized the other arm of the writer, and drew him forcibly aside. "You now see, Sir," said he, "that the unhappy and lost wretch who deals out this impious and atheistical creed is as complete a maniac as any of the numerous unfortunate beings whom we have been contemplating! He is otherwise harmless; but his words are pestilential, when he touches on the subject of divine revelation. I am, Sir, the only individual in this vast asylum, who is in his perfect senses. I am cruelly and unjustly confined here, and, as I see you are a physician, I hope you will exert your influence in rescuing me from the company of maniacs." The writer promised this exertion in the Priest's favour, but soon found that he, too, had his delusion. It turned out that the Barrister was not so insane upon religious topics as on some others. His insanity was first discovered by a pathetic love-letter to a beautiful young English lady at Florence! It is notorious that the insane are perfectly conscious of the madness of their comrades, while they are totally blind to their own. But is not this the case with every eccentricity—every obliquity of intellect—every failing of human nature?

* The Editor of this Journal was very much amused, one day, while visiting the Lunatic Asylum, in Florence, (where it is the custom to send all insane people, whatever their station in life,) by the conversations of a Priest and an Advocate, who were monomaniacs of such a harmless description that the keeper permitted them to accompany the Editor round the whole of the wards and cells of that great and wretched asylum. These two inmates of this gloomy retreat were men of considerable talents and learning. They described in most affecting terms, the various maniacs who paced the wards in musing melancholy or muttering soliloquies, as well as those who clashed their chains in solitary confinement. Not a word escaped either of them, in the slightest degree in-

deception? Now, although this "*trash-spouting*" propensity may be Dr. Haslam's hobby, eccentricity, monomania, or whatever other species of intellectual obliquity we may choose *to* call it; still it constitutes no small item of his support, whether it be uttered, *viva voce*, while walking the circuits, or weekly vomited forth, as is pretty strongly suspected, from the LANCET OFFICE. Mr. Brougham has done Dr. Haslam a serious injury in thus lopping off, for ever, his office of "walking witness" to the commissions of lunacy.

We shall say but a few words respecting the jury. We would not swear that they were "compos mentis," in deciding that a man was perfectly sane, after fourteen or fifteen medical men (most of them mad doctors, who can scent insanity as unerringly as a vulture can scent carrion) swore that he was insane! True, they had the evidence of two doctors in favour of Mr. Davies' soundness of mind; but these evidences were by no means strong—they were negative rather than positive, and we beg to suggest that one unequivocal instance of insanity being proved, is worth twenty interviews where the hallucination is not forthcoming. We sincerely hope that TIME may prove the jury to be sane.

Of Dr. M'Michael, who played his part so very cleverly, we entertain some suspicions; and we are not quite sure that even he did not labour under a "temporary delusion." The Doctor stated on oath, that he received the deposition of Dr. Burrows, with the Lord Chancellor's order to visit Mr Davies. That he read this report, cannot be doubted, because he refers to two of the points of delusion under which Mr. D. was there stated to labour. Many other points of delusion were recorded in Dr. Burrows' report; yet Dr. M'Michael, in his cross examination, declares that he heard nothing of *these other points of hallucination* till they came out in court. Dr. M. is a subtle casuist, and no doubt he will be able to clear up this knotty point.

But of all the mad doctors assembled on this mad investigation, Dr. M'Kinnon appears to have been the most mad—or the most modest, which is the same thing in physic. What a glorious opportunity has he lost of obtaining a legitimate PUFF of the very first water! When asked—when even *pressed* to state the amount of his fees, or in other words, the extent of his practice, he stood more coy and modest than Goldsmith's village maid, for she was "*half*-willing to be *pressed*"—and thus he neglected to turn to account one of those golden chances, for which *some* of his confreres (with half his practice) would have given a year's fees! O fie Dr. M'Kinnon, you will never succeed in modern Babylon!

Of all the DRAMATIS PERSONÆ, in this memorable transaction, there is only ONE whom we can pronounce to be SANE—and that because a *jury*, rather than JUDGES, determined him to be so. That Mr. Davies *had been* on the wrong side of the line which is supposed to separate eccentricity from insanity, we believe no man on the right side of that line will deny—that he was perfectly recovered when the ordeal took place, we have doubts—and that he has strength of mind to bear this splendid victory over his opponents, we have fears. We have lived long enough in this world to know, that evil, to a strong mind, very generally proves in the end a benefit—while, to weak minds success is the greatest curse.

Admiring, as we do, the laws of our native land, yet, considering that they were framed by men, we suspect they are not perfection. Insanity is a disease requiring the light of medical science to ascertain its existence, when arrayed in dubious colours. The law says that the only legitimate judges of the disease shall be exempted from serving on juries. Does this infer that no 12 honest medical men could be found to hear the evidence respecting sanity or insanity, and afterwards to examine the individual, whose mental powers were subjected to scrutiny? A man may be immured in a lunatic asylum on the faith of a single medical practitioner—and a medical practitioner *only*;—but when a solemn investigation takes place, as to the true state of the man's mind,

the jury (who are erected into judges) are composed of men having no knowledge whatever of the nature of the subject they are to decide upon!! If it be said that the jury have the advantage of medical witnesses, let the late trial be contemplated. The jury decided *against* fifteen medical witnesses, before they heard a single witness on the other side of the question! We think there can be little doubt that this hasty, we had almost said *ex parte*, decision arose from the insanity of some of the medical witnesses, who, in the minds of the jury, were fitter subjects for seclusion on Clapham Rise than Mr. Davies. We apprehend that this trial will prove an æra in the transactions of lunacy commissions. Lawyers are tolerably acute. The supporters of a commission "de lunatico inquirendo," will be somewhat cautious how they pack a witness box with mad doctors and ragged itinerant evidence! The human mind revolts against a display of strength collected apparently for the purpose of gaining a legal victory, rather than for the establishment of truth, the interests of society, and the protection of personal liberty.

II.

EMPLOYMENT OF THE SUTURE FOR VESICO-VAGINAL FISTULA.*

In the last number of this Journal we collated some valuable clinical observations on that dreadful affliction vesico-vaginal fistula, delivered in their respective schools by M. Dupuytren and Mr. Earle. The following case will not be devoid of interest to such of our surgical readers as take an interest in this class of cases. We may say that a proper acquaintance with such subjects as these is infinitely more necessary in a practical point of view, than a knowledge of what are commonly called the higher, that is the more theoretical parts of the profession. Leave to the subtle disputants of the schools, resign to the bookish theoric, disquisitions on what they call principles and laws, but let us revert to the fountain head, to the sources which give origin to theories and which crush them, to the study of *cases*, to the real investigation of disease.

Case. Maria Reggiani, æt. 22, had suffered since her first confinement, which had been a severe one, from vesico-vaginal fistula of such size as readily to admit the finger into the bladder. After employing various means for the space of eight months, she repaired to Bologna to consult Dr. Malagodi, who performed an operation for her infirmity on the 28th of August, 1828, with the assistance of Drs. Montebagnoli and Rosaspina.

The patient was placed in the position adopted for the operation of lithotomy, and the operator introduced the forefinger of the right hand, covered with the finger piece of a glove, into the fistulous opening. The two last phalanges of the finger were then bent like a hook and the callous edge of the ulceration on the left side, dragged down to the orifice of the vagina. This edge was then sliced off by a semilunar incision with a straight bistoury held in the left hand. The left fore-finger was then introduced into the fistula, its callous border on the right side made to present externally, and then sliced off like the former by the bistoury held in the right hand. In order to retain the pared edges in contact, the operator provided himself with three much curved and very small needles, each armed with a thread, and mounted on a handle which might be fixed or removed at pleasure. The index finger of the right hand was then re-introduced into the opening, and its left lip again brought into view. Taking a needle mounted on its handle in the left hand, it was carried from behind forwards through the vesico-vaginal wall, near the posterior angle of the wound. The second and third needles were then passed in the same manner and at equal distances from each other, and the same steps

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* Raccoglitor Medico. Bologna. July 1829.

pursued on the opposite side. The ligatures were tied two and two, the lips of the wound brought into accurate contact, the patient conveyed to bed with injunctions to lie upon her back, and a catheter introduced into the bladder to prevent the urine from accumulating in the latter.

For two days the urine flowed through the instrument, but on the third, the lint retained in the vagina was found to be bathed with this fluid. On examining the condition of the parts on the following day, the two posterior litagures were found to have answered in procuring union of portions of the wound, but the anterior ligature had cut through the parts on the left side, and consequently nearly the anterior third of the fistula was not closed. Cauterization with the nitrate of silver had been tried without success prior to the present operation, but the operator conceived that although it failed then, it might answer better now that the opening was so much diminished in calibre. Accordingly this measure was employed and the catheter constantly left in the bladder. At the end of three weeks a perceptible amelioration was perceived, and about the beginning of January the patient was declared by M. Montebagnoli to be quite cured.

The case forms an excellent pendant to Mr. Earle's clinical lecture.

III.

LIBERTY OF THE PRESS.

It is an old observation, that those demagogues who bawl out with greatest vehemence for liberty, and denounce with direst imprecations all who would impose shackles on human actions, are the most imperious tyrants the moment they become invested with power. It is so with the heroes of the radical press. They abuse, slander and vilify all to whom they are opposed; but the instant that any thing like a retaliation is made on themselves, they fly to the strong arm of the law—and when the courts of justice have become too familiar with their character, then the club or the pistol is raised against any individual who attempts to pay them home in their own coin. The men of the LANCET will never more prosecute for libels. They are too well known in court; and their adversaries are now sufficiently versed in the law of libel to defend and attack, without risk of legal proceedings.—Thus matched, and over-matched in fair and open literary warfare, an effort has been made to gag the medical press by powder and shot! Men, whose lives are of some value to the community, as well as to their families—whose assertions have weight with the public, because they are known to have some regard to honour and truth—men, in fine, who have a character as well as a life worth preserving, are now forsooth, to be called to Chalk-farm, by every obscure dabbler in scandal, who indites a lucubration in the radical press! According to this system of club-law, no respectable editor of a journal can expect to exist for six months, even were his aim as steady and as fatal as that of a Macnamara or a Stackpole! Individuals must succumb beneath numbers, for the hydra-headed monster of the radical press could never be decapitated by a single arm. Men, whose lives are worthless to the community, and, perhaps, a burthen to themselves—who have no character to lose—who had rather have celebrity, even in a bad cause, than no celebrity at all, would always rise, in rapid succession, were the pistol and the bludgeon to become the arbiter of the press! Fortunately, however, we have, in this country, laws to protect us from open aggression, arms given us by nature to repel brutal assaults, and a FREE PRESS to refute calumnies and aspersions on our character.

These general remarks have been suggested by a recent and wanton assault—or at least, the threat of an assault, on the person of a private physician, whose name even is not attached to any journal, and who, by reason, common sense, and law, is not responsible for writings unauthenticated by his signature, however public rumour, with her

hundred *lying* tongues, may couple his name with anonymous essays. Had any one the hardihood or indelicacy to make Sir Walter Scott responsible personally for any remarks in his various publications, till he chose to avow himself as the author of his works? No! No Englishman at least. A foreigner, indeed, we believe, did once make himself ridiculous by his *assumptions*, and was laughed at for his pains. The celebrated Scotch novelist, even when interrogated by his sovereign, did not consider it necessary or imperative to avow himself the author of works which he chose to publish anonymously. The law has provided a responsible subject for every line that issues from the press, in the person of the publisher or printer, where the author is anonymous—and no man has a right to go beyond the arm of the law. What would be thought of that Attorney General who commenced a criminal information against a *supposed* author of an anonymous libel on king or minister? And what right has Mr. M'Christie or any other individual to persecute or prosecute Dr. Macleod because he has heard that he is the editor of the Medical Gazette? We say that he had no right to do so; and had Dr. Macleod accepted a challenge upon such an assumption, he would have betrayed the liberty of the subject as well as the liberty of the press. It cannot be said that we have either personal feelings or fears on this point—for the Editor never concealed his name, and never shrunk from responsibility, legal or otherwise. But we strongly protest against the impudent and presumptuous system of calling upon an individual for personal satisfaction, merely because rumour has assigned to him the authorship of this or that production. And if Dr. Macleod had put his name on the cover of the Medical Gazette, as responsible in law for what appeared in that Journal, we do not conceive that the interests of science, the freedom of the press, or personal honour call upon him to go out, pistol in hand, with every author, reporter, or case inditer, whose feelings may be hurt by criticisms in his Journal. We admit indeed that nothing but an extreme necessity should induce a journalist to give the lie direct to the assertion of any writer, however humble his station in life, or however problematical the character of his lucubrations. But the present case was very different from that of a direct imputation on the veracity of Mr. M'Christie by the Editor of the Gazette, whoever he may be. The imputation was made on the express authority (in writing) of Mr. Earle, the party principally concerned—and if Mr. M'Christie had given himself a moment's time for sensible consideration, he would have seen the propriety of applying at once, to Mr. Earle, to know whether the allegation in the journal was correct. If Mr Earle authorised, in writing, these accusations of falsehood against Mr. M'Christie, and acknowledged that he had done so, was *he* not the proper person to be called to account? But, no. Mr. M'Christie, instead of attacking the real, the acknowledged, the publicly named impugner of his veracity, flies to wreak his vengeance on a private individual, who is *suspected* of being the Editor of the Journal through which the accusation was made!! Was there ever such a piece of injustice, such an instance of madness, in any man pretending to common sense, or the slightest perception of what is right, proper and decent? Here there was not the least attempt made to fix the injury on its proper author, whose name was proclaimed to the world, and who was, in all honour and justice, the responsible person. No! The penalty was to be inflicted, not on the *father* of the sin, but on the unfortunate *Accoucheur* who was *suspected* of bringing it into the world!

The cause of all this unjust and disgraceful proceeding is clear enough. We have not the smallest doubt—no man can doubt, that Mr. M'Christie was instigated by advice, which sober reflection will convince him one day, if it has not already done so, was bad and dangerous advice. Mr. Abernethy has said—and he has said some true things in his time—that "*there is such a thing as common sense.*" COMMON SENSE prevails in our profession, if it is to be found

upon earth. Mr. Wakley and his reporter Mr. M'Christie,—and all those concerned with the LANCET, will find, ere they die, that a system of brutal violence, and reckless injustice cannot long succeed, in any range of society—and much less in a profession whose members are generally imbued with a liberal education, and whose COMMON SENSE and keen perceptions of right and wrong will not permit them to be led far astray, even by the most vivid excitement of a temporary hallucination. Every rising sun clears away some of the haze that hovers round the character of men—and, at last, they stand in their true colours and dimensions before the public eye. It is a true sign of folly to expect that the mist of delusion can last for ever. There is no instance of such an event on record!

IV.

CASES OF EXTIRPATION OF THE OVARIES.

"Chirurgus medico quo differt? Silicet isto,
"Enecat hic succis—enecat ille manu." *Max. Urentius.*

We are not among those who are ardent votaries of gastrotomy, nor do we consider the extirpation of an ovary or uterus as a mere bagatelle. At the same time, when cases of this description are recorded, it becomes our duty not to pass them in total silence.

Case 1.* A Polish woman, 40 years of age, of middling height, well formed, and of good constitution, applied to Dr. Dieffenback, of Berlin, on account of a tumour in the lower part of the abdomen. On examination the hypogastrium was found to be distended by a round tumour, moveable in every direction, and the abdominal parietes over its central part appeared to be only a quarter of an inch in thickness. The patient had been married since the age of 18, had always menstruated regularly, but never borne a child. The tumour had existed for ten or twelve years, and was attributed by the patient to the infliction of a blow and domestic annoyances. She was anxious to be rid of it, and applied to Dr. Dieffenback for that express purpose although several other surgeons had entirely discountenanced an operation. A consultation was called, and as is usual on such occasions, there were nearly as many different opinions as consultants, but the result of it was that Dr. Dieffenback performed the operation. An incision was commenced three inches above the umbilicus, carried down along the linea alba turning away from the navel to the left, and continued to within four or five inches of the symphysis pubis. The tumour was found to be in the interior of the peritoneum, and the latter was accordingly laid open at the superior part of the wound. A round blueish-coloured tumour, of a cartilaginous consistence now occupied the opening in the peritoneum which was about four inches long. "*Unfortunately* an attentive examination proved that the tumour had a large base, containing vessels which pulsated strongly, and appeared to be attached to the spinal column." An opening which was made into the tumour gave rise to hæmorrhage which was only restrained by compression. The operator now found that he had caught a Tartar, and precipitately closed the wound in the belly which he had rashly, we had almost said ignorantly, made. Bad symptoms as vomiting, hiccup, &c. supervened, and it was only by active depletion and her lucky stars that the patient escaped from a fatal termination of her self-willed *divertissement*.

The foregoing case speaks so intelligibly for itself that remarks are almost unnecessary. We shall only say that no well-informed surgeon in this country would dare to cut into a woman's belly, under such circumstances as those detailed. The consequences of formidable operations so wantonly and foolishly engaged in, must be deserved disgrace to the surgeon, and worse than that, most probably destruction to the patient.

* Rust's Magazin, B. 25, H. 2.

Case 2.* A female peasant was brought to bed with her eighth child at the age of 41, and two years afterwards her menses ceased to appear. From this time she experienced a dragging in the left hypochondrium, and a dull pain in the hypogastrium, attended with tumefaction of that region. At the age of 46 the abdomen was as much distended as at the 9th month of pregnancy, and MM. Hopfer and Chrysmer who saw the patient, pronounced the disease to be disease of the left ovarium complicated with ascites. At the request of the unfortunate woman M. Chrysmer performed the operation. An incision of the integuments was commenced at the xyphoid cartilage and carried down to the symphysis pubis, turning to the left of the naval. The peritoneum was laid open for the same extent, and about eight pints of serous fluid evacuated, when the intestines and omentum protruded through the wound. The tumour was adherent to the colon, peritoneum, and stomach, and it took more than twenty minutes before these adhesions could be divided. The pedicle of the tumour which rested on the os ilii and arose from the broad ligament, was first tied with a double ligature, and then cut across between them. In thirty-six hours after the operation the patient died of mortification of the intestines. On examining the extirpated ovary, it was found to be irregular and lobulated, weighed seven pounds and a third, was cartilaginous in some parts, and in others presented excavations filled with a stinking and greenish sanies, and finally in other parts still its texture was lardaceous. The right ovary was sound.

This is just the history of genuine ovarian disease, and just the results which would probably follow an operation in ninety-nine cases out of the hundred. As the ovarian tumour grows it almost always contracts adhesions with the neighbouring viscera and parts—adhesions and connexions, the separation and dissection of which is often extremely difficult in the dead body, and must be dreadful work in the living.

Case 3. A woman, æt. 38, had been brought to bed five times in the course of seven years. Subsequently to the fourth accouchement she suffered from inflammation of the uterus which lasted for several weeks, and from this time the patient complained of a dull pain in the left hypochondrium. A year and a half after her last accouchement a little tumefaction shewed itself in this region, disappeared for a while under the use of some sulphur baths, but returned and extended over the hypogastrium. In the course of two years her menstruation ceased, and was replaced by a foul and white discharge, which weakened the patient very much. M. Chrysmer was consulted, and recommended the operation which was performed as in the preceding case. Great part of the intestines escaped when the opening was made in the peritoneum, and were immediately enveloped in a warm and moist towel. The adhesions of the tumour to the peritoneum and brim of the pelvis were divided, its pedicle-like attachment to the broad ligament tied with two ligatures and cut across between them —the tumour then removed—the intestines transferred from the towel to their natural situation—the pelvis *sponged* out—and the wound united by the suture. The operation lasted a quarter of an hour, and immediately after its conclusion a nitrous emulsion was prescribed. A slight rigor and hiccup succeeded, but were calmed by a few doses of Sydenham's laudanum. Strange to say the patient survived, was able to return to her home in six weeks, and has since borne a healthy child. The tumour weighed eight pounds, was larger than the head of a child, was irregular, of livid colour in some places, and contained numerous cavities filled in part with a melliform matter, in part with a greenish and sanious fluid.

Case 4. An unmarried woman, 58 years of age, small, affected with rickets since

* This and the two following cases are from *Graefe and Walthers' Journal*, 12 B. 1 H.

childhood, and who had suffered from chlorosis, fluor albus, irregular menstruation, and chronic affection of the liver, prayed M. Chrysmer to remove a large irregular tumour from the left iliac region, which made the abdomen look like that of a woman advanced in pregnancy. Besides this tumour the left lobe of the liver was felt enlarged, and an accumulation of serum was detected in the belly. Mr. Chrysmer, who appears to be quite the Coryphœus of ovariotomists, performed the operation as before. On opening the peritoneum nearly five pints of offensive serum, of greenish yellow colour, flowed from the wound. The tumour presented no adhesions except towards the sacro-iliac synchondrosis. The pedicle was four inches thick; it was tied and cut.—Fainting fits succeeded and the patient expired in thirty-six hours On examining the body the peritoneum and intestines were found to be gangrenous, the uterus cartilaginous, the right ovary double its natural size, and tubercles in the right lobe of the liver. The tumour that had been extirpated weighed six pounds and a half, and its texture was lardaceous.

Case 5.* A girl, ætatis 24, was brought to bed in November, 1824. In January, 1825, the catamenia re-appeared and continued to flow regularly from this time till August, although they were more copious than natural, and accompanied with pain. In October she was thought to be pregnant again, but examination proved that she was not so, the belly being as large as in the eighth month. From the month of February the patient had profuse fluor albus and pains at first in the left iliac region, subsequently in the right. These symptoms had first appeared after connexion. The disease was considered to be encysted dropsy of the right ovary, and the tumour becoming more tense and fluctuating a puncture was made on the 15th December, and eight pints of serum evacuated. The pains ceased and the tumour diminished to the size of a fist, but on the 8th January the puncture was repeated; calomel, digitalis and conium administered; and frictions made with mercurial and digitalis ointment, as well as with that of the hydriodate of potass. These measures, however, failed of success, and on the 22d January the operation of paracentesis was again had recourse to, and the cyst afterwards injected with warm liquid consisting of one part of alcohol and eight of water. The injection was allowed to remain in the cyst for half an hour, the wound healed, and no bad consequences would seem to have ensued. Towards the middle of April, however, the belly again swelled and the tumour was harder than ever. Two punctures were made, but instead of serum portions of *omentum* came out and were removed by ligature. M. Martini, under whose care the patient was, now determined to operate, *because* he feared that his injection had occasioned a polypous or steatomatous degeneration of the tumour. This was what is vulgarly called "getting out of the frying pan into the fire," and repairing one faux pas by a worse.

However, an incision nine inches in length was made; the belly opened in the hypogastrium; and a smooth, round, white tumour, the size of a man's head, and apparently firmly fixed to the brim of the pelvis, was exposed. No pedicle was to be had, and a kind of cyst appearing at the superior part a trocar was plunged into it, and a pint of serous fluid discharged. The walls of the tumour collapsed, and some convolutions of intestine and a part of the omentum protruded. The operator not being able to separate the tumour from the bladder, the rectum and the pelvis, "was contented" (he could not well be otherwise) with removing the sac to prevent any fresh accumulation of fluid. Some arteries were tied and the wound brought together by suture. The first day passed off pretty well; on the second a considerable quantity of serum escaped by a canula which had been left at the inferior part of the wound; on the third day the discharge became bloody, prostration and hiccup, &c. set in, and the patient died

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Rusts's Magazin, B. 27, H. 3.

"thirty-six hours" after the operation. On examining the body, the tumour was found to have extended into the hypogastrium, to be lardaceous in texture, and to contain "caverns filled with sanies." Below the tumour was a collection of bloody fluid. The disease was found to be situated in the left ovary, which by its morbid growth had extended to the right side and depressed the uterus. The fallopian tube and part of the broad ligament, formed the peduncle of the tumour. No trace of inflammation was discovered in the abdomen, so, says the narrator of the case, it is probable that the patient died from the quantity of the bloody and serous discharge. It is much more probable that she died from the shock and irritation of so formidable and ill-judged an operation.

Our readers can form their own opinions on the foregoing cases; we certainly have formed our's. One only out of five was cured, and a miracle that seems to have been; and in two out of the remaining four, the operation was abandoned when half done, in consequence of the difficulties and obstacles that presented themselves. To those much acquainted with morbid anatomy this will not appear at all surprising; on the contrary, the wonder with them will be, that the operators managed as well as they did. No man can certainly tell before he opens his patient's belly, whether the tumour has a stalk or whether it has not; whether it be extensively adherent to the pelvic and abdominal viscera or otherwise; whether, in short, he will be able to complete an operation the propriety of which is questionable at the best, or whether he may be compelled to arrest his hands in the middle of it. This is a fearful prospect to a conscientious surgeon, for it is almost too late when the interior of the abdomen is displayed to pronounce that the case is not one for the knife. But there is yet another circumstance to "give us pause." Are we always sure of the nature of an abdominal tumour — have ovarian diseases never been mistaken? A very eminent operator performed gastrotomy for ovarian tumour, but found none; an uterus was lately removed in Paris, and discovered to be healthy! Will such facts have no weight on the minds of the profession? Do not the rash remedies of the physician, and the desperate attempts of the surgeon almost authorize the sarcastic observation of Urentius quoted as the motto to this article, and which concludes thus:—

"Carnifice hoc ambo, tantum differre videntur:—
"Tardius hi (medici) faciunt, quod facit ille (chirurgus) cito."

V.

SPONTANEOUS PURIFICATION OF THAMES WATER.

Dr. Bostock has published a paper on this subject in the Philosophical Transactions, which may afford some consolation to the involuntary drinkers of Thames puddle and and common sewer scourings — namely, that, if they can keep the water in reservoirs for some weeks, the contents of privies with which it is so fully imbued, will be converted into very comfortable and wholesome medicines, viz. lime, sulphuric acid, magnesia, &c. Dr. Bostock was supplied with a certain quantity of water, "taken in the river, in the current of, and immediately at the mouth of the King's Scholars' Pond Sewer." He described it to the Commissioners as "in a state of extreme impurity, opaque with filth, and exhaling a highly fetid odour." It was, after a week, passed through a layer of sand and charcoal—and then suffered to rest for several weeks, when it was found that a great change had taken place in its appearance. It had become much clearer, while nearly the whole of the sediment had risen to the surface, forming a pretty regular stratum of about *half an inch in thickness* — the odour still continuing extremely offensive—"perhaps even more so than at first." In eight weeks more, the water became perfectly transparent, without any unpleasant odour, though still retaining somewhat of its original dingy colour. The scum subsided in masses to

the bottom leaving the water apparently free from extraneous matters. It was filtered through paper and analyzed—when it was found to contain carbonate of lime—sulphate of ditto, muriate of soda, and muriate of magnesia. "The results of this analysis," says the Doctor, "show that, although the water has, by this depurating process, freed itself from the great quantity of organic matter which it contained, and acquired a state of *apparent* purity, which might render it sufficiently proper for many purposes, (not we should think for drinking) yet that the quantity of saline matter is increased fourfold." This depurating process, Dr. B. considers a species of fermentation, an operation, wherein a substance, without any addition, undergoes a change in the arrangement of its component parts, and a new compound or compounds are produced. The source of the saline bodies above mentioned, he supposes to be the organic substances, "principally of an animal origin, which are so copiously deposited in the Thames water:—Of these the most abundant are the *excrementitious matters*, as well as the parts of various undecomposed animal bodies."

"The different species of the softer and more soluble animal compounds act as the ferment, and are themselves destroyed, while the salts which are attached to them are left behind. It may be conceived therefore that the more foul the water is, the more complete will be the subsequent process of depuration; and we have hence an explanation of the popular opinion, that the Thames water is peculiarly valuable for sea stores, its extreme impurity inducing the fermentative process, and thus removing from it all those substances which can cause it to undergo any further alteration."

It is to be remembered that Thames water for shipping is generally taken up about Greenwich, or even so low down as Woolwich — at least this was the place from whence water was taken up, and which we had the misery of drinking all the way to China—holding our noses at the same time, as the smell was infinitely worse than the taste. It is very true that, after many months standing, or rather rolling in the holds of the ship, this water becomes clear, and comparatively free from disagreeable odour—but no chemistry, we imagine, can reconcile us to this change of excrementitious matters into carbonates, sulphates, muriates, and other names however familiar to our pharmacopœial ears! It is astonishing, considering that three-fourths of our senators are obliged to drink this excrementitious fluid during their parliamentary duties in London, that they do not rise up, one and all, to stop the evil by laws of which they are the framers!

Dr. Bostock's paper is written with such obscurity and confusion that we had some difficulty in making out its true sense and bearings.

VI.

CASE OF CYSTOCELE WHICH WAS NOT RECOGNIZED FOR A GREAT NUMBER OF YEARS.*

Several cases of hernia of the bladder are on record, one of the most remarkable in the works of Mr. Pott, but no doubt many have occurred which were either not understood at all, or mistaken for other varieties of hernia. Mr. Gilbert Burnett related an interesting case of cystocele in the early part of the present season at the Westminster Medical Society, and another instance of this affection is recorded by M. Ribell of Perpignan, in the Archives Générales. It is useful on occasions to be aware of the symptoms and character of rare diseases, as no practitioner can be sure that a case of the kind will not happen to himself, and his character will rise or fall in proportion to his acquaintance with or ignorance of the subject.

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* Archives Générales, Nov. 1829.

Case. M. P * * *, of Prats de Mollo, fifty-eight years of age, had suffered for upwards of thirty years from difficulty of making water, without much pain, but a necessity of micturition every two or three hours. Prior to the first appearance of this complaint, he had suffered from an eruption on the leg which was healed by proper treatment, and after the cure of which the urinary symptoms commeneed. M. P* * * had likewise suffered since birth from a large inguinal hernia on the left side, and since the age of fifteen or eighteen from a smaller one on the right. Neither were treated with a truss until the patient's marriage at the age of 25, when one was applied which made but ineffectual compression. The difficulty of making water began about the age of 28, but for five years the patient took no medical advice on the subject. Being then rather alarmed at its continuance he repaired to Perpignan, and was sounded by several surgeons. They informed him that the bladder was healthy, but that the urethra presented numerous strictures which occasioned great difficulty to the passage of the instrument, and had been occasioned by the disappearance of the cutaneous affection on the leg. We need not stop to notice the treatment founded on the foregoing diagnosis, suffice it to say that it did no good, and the patient abandoned the regulars to put himself into the hands of a Quack. He promised largely, and gave him strong doses of the corrosive sublimate with the effect of "horribly fatiguing" the stomach. We should here observe that the patient had never suffered from syphilis or gonorrhœa.

On the 22d of August, 1828, having been troubled for five days with more than ordinary dysuria, M. P* * * was suddenly seized in the evening with complete retention of urine. After much straining he voided a little pure blood, and subsequently some blood mixed with a little urine and much mucus. Our author was summoned from Perpignan, but owing to the distance was unable to arrive until after the lapse of 24 hours. He had then just made water, though with difficulty, and was free from any fever or excitement. On a subsequent visit our author determined to satisfy himself of the state of the bladder and urethra, but on introducing an instrument, he was not a little surprised to find that it could be passed without difficulty or obstruction of any description, and half a wine-glass full of limped urine evacuated. It was quite clear from this fact that there was not, and never had been a stricture of the urethra. But what was there then to account for the dysuria of thirty years' duration? By dint of close inquiry and accurate examination the following particulars were ascertained.

1mo. The difficulty of making water was always greatest when the inguinal hernia on the left side was most voluminous.

2ndo. If the nisus of micturition occurred at the moment when the hernia was small, the urine escaped in a free stream, but if during its evacuation the hernia escaped or enlarged, the flow of the urine was abruptly checked.

3tio. Experience had taught the patient, and without his knowing how or why, that in order to make water easily, he should raise the hernia and make the neck the most dependent part.

4to. After making the patient retain his water as long as possible (scarcely four hours) and keeping him on his legs in order that the hernia might protrude to the utmost, the catheter was introduced and about four spoonfuls of water only abstracted; this too could not be effected till the hernia had been reduced.

5to. A forcible injection of two wine-glass-fuls of water into the bladder produced the following results:—It excited a very strong desire to make water, the patient not being accustomed to retain so much liquid in the bladder at a time: it produced a very sensible enlargement of the inguinal hernia, though the patient continued recumbent, and it occasioned a distinct sense of fluctuation in the hernial tumour towards its neck.

6to. The hernia on the right side (an intestino-omental one) was readily and completely reducible.

7mo. The left, on the contrary, was irreducible. It appeared to contain intestine towards its lower part, and the testicle seemed to be united to the gut. The neck of the tumour, when grasped between the finger and thumb, gave the sensation of comprising within it two lubricated membranes slipping on each other.

From the foregoing premises, M. Ribell concludes that his patient is affected with a congenital hernia on the left side, originally intestinal; that this hernia not being restrained by any pressure has insensibly enlarged, and involved the bladder; and finally that the latter viscus has contracted adhesions in its new situation, and is consequently irreducible. We perfectly agree with the well-informed narrator of the case, which is a very satisfactory one. It seems rather singular, that although a fluctuation was felt at the neck of the hernial tumour when the bladder became distended, no mention is made of *pressure* on this part evacuating the organ. In the few cases of which we have read, this symptom was particularly noticed, and in one, if we remember right, the patient told his surgeon that the "urine came from his rupture, for he could not piss unless he pressed upon his groin." With regard to the methodus medendi, we fear that the mischief has proceeded too far in the present case to admit of relief from art. The adhesions of the bladder and the diminution of its calibre, the necessary consequences of its long continuance in the sac, are accidents or alterations for which we have no remedy. Pressure is obviously now out of the question.

VII.

CURRICULUM OF THE IRISH COLLEGE OF SURGEONS. 1830. With Strictures.

By this Curriculum the system of apprenticeship has received a wound which all the salves and *salvos* of the College will not be able to heal. The system itself had a strong tendency to decay and death; but this Curriculum which, in reality, is designed to prop up a rotten constitution, will only accelerate its dissolution.

The public voice being strong against the apprenticeship system, then, the College has obtained a new charter, in which there are two portals leading to the Temple, one of which is guarded by a dog of the Cerberus species—the other beset with syrens, whose warbling notes are in praise of the old system of apprenticeship and *calculated* to lure all unsuspecting youths to enter through that portal. To approach by the other, the Cerberus is not only to be sopped by very costly dishes, but various gorgons, hydras, and scorpions are planted along the hall, to deter the candidate for collegiate honours from making his way through that entrance. The explanation of this is not very difficult. Candidates for a license may be either registered apprentices or independent students—and that on the following conditions.

"APPRENTICE.

"Indenture of five years' apprenticeship—Thirty guineas.—Certificates of attendance on hospitals, lectures, dissections, &c. *for a time not defined!!*

"NON-APPRENTICE.

"Certificates of six years' study.—Sixty guineas.—Certificates of three years, or five winters' hospital attendance, three courses of anatomy and physiology, three of surgery, three of dissections and demonstrations, two of chemistry, one of materia medica, one of practice of medicine, one of midwifery, and one of medical jurisprudence."

The monstrous injustice of leaving undefined the course of study for the apprentice, and which would, doubtless, be construed in his favour by the masters who pocket the profits—coupled with the severe and expensive course of study carefully chalked out for the non-apprentice, and saddled with a double fee to the College, is such, that we would be willing to believe the omission accidental, did we not know that a Boeotian

atmosphere surrounds all corporations, and prevents the members from seeing what is clear as noonday to all other people. Is it not astonishing that men, in the year 1830, could be so stupid as to suppose that the barefaced injustice of the above regulations would not instantly be patent to the meanest capacity, the moment they were read! What is this proceeding altogether but an attempt to prevent the use of a healthy article of intellectual food by a tax designed as a prohibition—while a high premium is offered for the consumption of an article destructive to the mind as poison is to the body? Who can wonder — who indeed can grieve, that radical feelings of insubordination and disaffection should be engendered and flourish, where the medical aristocracy of a country can be guilty of such gross insults on common sense as well as justice and good policy. We shall here introduce the Curriculum and formula of the examinations.

"1. Candidates shall be admitted to an examination for letters testimonial as apprentices, and shall be entitled to the *privileges reserved for apprentices*, if they shall have been duly registered as such on the College books.

"II. Every apprentice so registered shall be admitted to an examination for letters testimonial, if he shall have laid before the Court of Censors the following documents:

"1. A certificate signed by the President, or Vice-President, and two of the Censors, that he has passed an examination as to his acquaintance with the Greek and Latin languages in the following books,—viz. the works of Sallust, the first six books of the Æneid of Virgil, the Satires and Epistles of Horace, the Greek Testament, the Dialogues of Lucian selected by Walker, and the first four books of Homer's Illiad; or a certificate from his tutor that he has entered, as a student, Trinity College.

"2. His indenture of apprenticeship, with a certificate signed by the member or licentiate to whom he has been indented, that he has fully and perfectly served such apprenticeship for the full term of five years.

"3. A receipt showing that he has lodged, to the credit of the President, and for the use of the College, in the Bank of Ireland, the sum of thirty guineas.

"4. Certificates of attendance on hospital practice, on lectures on anatomy and physiology, surgery, the practice of medicine, chemistry, materia medica, midwifery, and medical jurisprudence; and of the performance of dissections, and attendance on anatomical demonstrations.

"5. A thesis, essay, or dissertation in Latin or English, fairly engrossed according to a prescribed form, upon any of the following subjects:—Anatomy, physiology, surgery, practice of medicine, chemistry, materia medica, midwifery, or medical jurisprudence; or, in place of such dissertation, a series of cases collected in the hospital in which the candidate has attended, illustrated by comments, or observations.

"III. Every candidate who has not served an apprenticeship shall be admitted to an examination for letters testimonial, if he shall have attended lectures, or hospitals, for three winter seasons at least, in Dublin, London, Glasgow, or Edinburgh; and if he shall have laid before the Court of Censors the following documents:—

"1. A certificate signed by the President, or Vice-President, and two at least of the Censors, that he has passed the examination as to his proficiency in the Greek and Latin languages, as prescribed for the registered apprentices: or a certificate from his tutor that he has entered Trinity College.

"2. A receipt shewing that he has lodged, to the credit of the President, and for the use of the College, in the Bank of Ireland, the sum of sixty guineas.

"3. Certificates shewing that he has been engaged in the study of his profession, in some hospital, or school of

surgery, or medicine, for the full term of six years.

"4. Certificates of attendance on a surgical hospital, containing at least 50 patients, during five winter seasons of six months, or three years, if such attendance shall not have been perfected during the winter seasons.

"5. Certificates of attendance on three courses of lectures on anatomy and physiology, three courses of lectures on the theory and practice of surgery, and the performance of three courses of dissections, accompanied by demonstrations; also certificates of attendance on two courses of lectures on chemistry, one course of lectures on materia medica, one course of lectures on the practice of medicine, one course of lectures on midwifery, and one course of lectures on medical jurisprudence.

"6. A thesis, or series of cases, as enjoined for registered pupils.

"IV. No certificate shall be received for attendance on lectures, delivered in Ireland, unless from teachers in schools permitting the visitation of the Court of Censors, and receiving their sanction.

"V. No certificates shall be received from teachers who deliver lectures upon more than one distinct subject, as hitherto allotted to professors in colleges and universities. This regulation, however, shall not exclude the certificates of a teacher who delivers separate, perfect, and distinct courses on anatomy and physiology, and on the theory and practice of surgery.

"VI. No certificate shall be received for attendance on lectures on anatomy and physiology, unless such lectures shall have been delivered upon at least five days in each week of the winter session, between the 1st of October and 1st of May; nor on the theory and practice of surgery, on chemistry, practice of medicine, materia medica, or midwifery, unless delivered within the same period, or at least three days in each week. The two courses delivered in London, and there called autumn and spring courses, shall, however, be considered equivalent to one winter course of six months, as delivered in Dublin and elsewhere.

"VII. Every candidate producing certificates of attendance on lectures, or hospitals, previous to his examination for letters testimonial, shall be liable to be examined respecting their authenticity; and if he shall refuse to answer thereupon, or if it shall appear from his answers, or from any other information obtained by the Court of Censors, that he has not attended such hospital or lectures with regularity, or according to the regulations laid down by the College, he shall not be admitted to an examination for one year; or should it be proved that he has presented a forged certificate, or a certificate obtained by causing some person to personate him and attend for him, he shall never be examined; and if such fraud shall be discovered after the candidate shall have obtained letters testimonial, he shall be expelled, and such letters shall be withdrawn; and shall be given up by him to the College, on demand in writing signed by the Secretary, or, in default thereof, proceedings shall be had against him on his bond.

"VIII. The examination of every candidate for letters testimonial shall be held in the presence of the members and licentiates of the College, or such of them as choose to attend; and the Secretary shall, by regular summonses, give at least four days' notice of such examination.

"IX. Every candidate for letters testimonial shall be solemnly examined on two several days, in anatomy and physiology, in the theory and practice of surgery and medicine, in chemistry, and materia medica. Candidates shall be expected to perform such surgical operations, or make such dissections on the dead body, as the Court of Censors may require; or they shall be called upon to explain any anatomical preparation which the examiners may lay before them.

"X. In case a candidate shall be rejected, and shall appeal to the Court of Assistants, such appeal, stating that he considers himself aggrieved by the decision of the Court of Censors, shall be lodged within

eight days from the date of rejection, and the candidate shall be admitted to examination within fourteen days from the date of such rejection. The examination before the Court of Assistants shall be conducted, in every respect, as the examination before the Court of Censors.

"XI. A candidate for letters testimonial who has been rejected, shall not be admitted to another examination, except upon his appeal, in a less time than one year from such rejection; and he shall then be required to lay before the Court satisfactory evidence of his attention and opportunities of improvement, subsequent to the period of his rejection.

"XII. The Court of Censors shall be authorized to examine candidates for letters testimonial, who have not been educated in strict conformity with the above by-laws, but who shall produce evidence of having received a professional education equivalent to that required by the College; provided such candidates apply for an examination, and lodge their certificates and other necessary documents with the Secretary, previous to the 1st of May, 1830. The Court shall also be authorized to receive certificates issued by competent teachers previous to the 1st of May, 1829, notwithstanding any regulation to the contrary in the above by-laws.

"MIDWIFERY DIPLOMA.

"XIII. The mark distinguishing practitioners in midwifery in the printed lists of the College, shall not be affixed to the name of any member or licentiate of the College subsequent to the 1st of November, 1829, unless he shall have obtained the license or diploma of the College, authorizing him to practise that branch of surgery as herein after specified.

"XIV. A Court of Examiners, consisting of a chairman, deputy chairman, and six members, shall be elected by ballot, on the first Monday in January in each year, to examine such members or licentiates as become candidates for the diploma in midwifery; any four of which court, with the chairman or deputy chairman, shall be competent to hold such examination.

"XV. Every candidate for the diploma in midwifery shall be admitted to an examination, if he shall have laid before the Court the following documents:—

"1. A receipt shewing that he has lodged, to the credit of the President and for the use of the College, in the bank of Ireland, the sum of five guineas.

"2. Certificates of attendance on two courses of lectures on midwifery, of six months' duration each.

"3. A certificate of attendance on an established lying-in hospital for a period of at least six months, or a certificate that he has been a resident pupil for six months in some established dispensary for lying-in women, and diseases of women and children; such hospital or dispensary to be approved of and sanctioned by the Court.

"4. Satisfactory evidence that he has conducted thirty labour cases at least.

"XVI. Candidates for the midwifery diploma, shall be examined on the anatomy and physiology of the female generative system, the theory and practice of midwifery, and on the diseases of women and children; and if approved of by the Court, shall receive a license or diploma to that effect, to which the College seal shall be affixed. Should a candidate be rejected, he shall not be admitted again to an examination until a period of three months shall have elapsed, and he shall then be obliged to produce satisfactory evidence of his having been engaged in the study of this branch of surgery subsequent to such rejection.

"WM. AUCHINLECK, President.

"October 23, 1329."

With the detailed regulations affecting the education of the NON-APPRENTICE, we do not find any material fault, provided the same regulations existed respecting the class of *serviles*, for so we must designate those who submit to the degradation of an indenture. But while *their* code of discipline is kept in the dark, and the mysterious words "*privileges reserved for apprentices*," are allowed to blot the page of a public re-

cord like this, we must protest against the justice of this College by-law, and consider it a disgrace to the nineteenth century.

VIII.

ON THE DIAGNOSIS OF HERNIA.

How much has been written, and how much remains for us to write on the subject of hernia, that bug-bear for the young, and too frequently stumbling-block for the old and the experienced. Some good observations on this subject, placed as it is on the confines of medicine and surgery, are contained in the late edition of Dr. Monro's valuable, but too diffuse work. We are not about to enter into the minutiæ or the ordinary points of hernia, God forbid! but we shall glance at one or two interesting portions of the chapter devoted to its consideration. And first of—

INGUINAL HERNIA.

We are all aware that males are peculiarly prone to this, and the other sex to the femoral hernia. The following tables, however, shew on a large and convincing scale the general laws respecting the individuals affected by the disease, the side of the body on which it is most frequent, and its more ordinary complications.

From July 6, 1805, *to July* 6, 1811. 1637 *Cases.*

			Males.	Females.
332 double	In both groins,		319	2
	thighs,		0	11
1257 single	Inguinal,	Right side,	671	26
		Left side,	354	13
	Femoral,	Right side,	5	54
		Left side,	2	37
	In the navel,		13	76
	Ventral herniæ,		3	3

Several patients having umbilical hernia, had also one or two inguinal or femoral herniæ, one person had a ventral, and two inguinal hernia.*

The following document, extracted from the 25th volume of the Philosophical Magazine, corroborates the former. 3013 patients were examined.

		Males.	Females.
741 Double Ruptures	In both thighs (femoral)	3	44
	In both groins (Inguinal)	609	85
2272 Single Ruptures	In one thigh (femoral)	57	136
	In one groin (inguinal)	1520	399
	In the navel (umbilical)	36	97
	Total,	2225	788-3013

Of the single ruptures, more than one-third happened on the left side, and nearly two-thirds on the right side. A very small proportion of triple ruptures, and other extraordinary cases, likewise occurred in the above number; but they were extremely rare, and mostly existed among the female sex.

These statements amply corroborate the general opinions regarding the sex most affected with inguinal or femoral hernia. They likewise prove the much greater prevalence of rupture on the right side than on the left, and the greater disposition in females to suffer from umbilical herniæ. Passing over the common varieties of the disease we stop at—

Inguinal Herniæ, which in situation resemble Crural Herniæ, owing to Malconformation of the Inguinal Canal.

The fourth modification of inguinal hernia is very rare, and occasioned by the malcon-

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* I am indebted to that distinguished physician Dr. G. GREGORY of London, for this statement."

formation of the inguinal canal, which is owing to the smaller tendinous fibres, which connect the larger columns of the external oblique muscle, being wanting.

In these circumstances the inguinal canal is imperfect; hence the bowels, when protruded, do not follow the course of the inguinal canal, but push immediately downwards and outwards, forming a tumour in the situation of a crural hernia.

This modification of hernia has been described by the late Professor HAMILTON of Glasgow, and also by PETIT. It remained for the late Mr. ALLAN BURNS of Glasgow to detect the cause of such a deviation, which he has described to me in the following letter, dated March 7, 1806:

The tumour was found in the bend of the eft thigh. The inguinal canal was fully as large as it is usually met with in the male, and besides, so very short, that it presented, when fully unfolded, almost the appearance of a mere aperture. The round ligament of the womb was enveloped in a distinct tunica vaginalis, and bearing the same relation to the intestine that the spermatic cord does in the other sex. On the right side, the herniary sac was about two inches in length, and in shape resembling a Florence flask; the bulbous extremity extending from the lower orifice of the canal, was contained in the upper part of the thigh, *lying more in the course of a crural than of an inguinal hernia.*

This deviation from the usual direction of the tumour was produced by a premature separation from each of the external pillars of the inguinal canal. Where the inguinal canal is imperfectly formed, it is generally owing to the incomplete extension of the posterior or internal side of the ring.

Where this happens, the internal orifice of the canal is brought nearer to the pubes than it ought to be, but when the imperfection is produced by a premature separation at the external pillars, then, by dissection, we find the internal orifice in its proper place, but the external outlet is removed from the pubes.

In the first instance, when the herniary tumour protrudes, it lies just over the tubercles of the pubes, and follows the course of the spermatic cord into the scrotum, while in the latter it lies nearer to the spine of the ilium, and is seated just over the crural foramen, and by extension, descends along the thigh, *counterfeiting the appearance of femoral hernia.*

By attention, however, it is readily distinguished from the latter, by being felt lying over the crural arch, and on the outer side of the tubercle of the pubes.

When the bowels follow the course of the inguinal canal, the epigastric artery is situated nearer to the symphysis pubis than the hernia; whereas, when the bowels do not follow such a course, but pass only through the under abdominal aperture, then the epigastric artery is situated nearer to the anterior spinous process of the ilium than the hernia.

The following remarks on the *Affections liable to be confounded with Hernia* are deserving of consideration and attentive perusal.

Swellings in the groin, or in the scrotum, proceeding from various causes, may sometimes bear a strong resemblance to inguinal or scrotal hernia.

1st, Fat in the groin sometimes assumes the shape of an inguinal or crural hernia, and being covered by a thin layer of condensed cellular substance, communicates to the touch nearly the same sensations as an omental hernia. If a patient, with masses of fat so situated, had been seized with colic and vomiting, and had been at the same time much constipated, recourse might have been had to an operation, for pressure does not alter the shape or bulk of such tumours.

The history of the progress of the swelling unfolds the nature of it.

2d, The testis, when arrested in the under abdominal aperture, forms a tumour not unlike to an inguinal hernia, more especially as the testis is not fixed in its place.

A swelling in the groin, originating from such a cause, may be discovered by the want of the testis in the scrotum, and by

the very peculiar sensation which pressure on the testis creates.

The case becomes much more puzzling when a turn of the intestine slips down behind the testis, sticking at the groin.

3d, A polypus contained in a cyst growing from the spermatic cord, bears a strong resemblance to an inguinal hernia.

4th, Crural or pudendal hernia has sometimes been mistaken for the inguinal. The diagnosis is founded upon the situation of the neck of the tumour; if the neck be placed above the margin of the crural arch, the tumour is an inguinal hernia, if under it, a crural hernia.

The pudendal hernia, situated in the middle of the labium, may be distinguished from the inguinal hernia by being placed on the inner side of the ramus of the ischium, and may be traced as far as the vagina extends: besides, there is no swelling in the course of the round ligament of the uterus from the groin.

5th, An inguinal hernia bears a considerable resemblance to a hydrocele, especially when the hydrocele extends within the inguinal canal, or when the serous fluid within the hernial sac is in large proportion to the other contents of the tumour, a fluctuation may be perceived in that part of the hernial sac. The fluctuation and pellucidity of the tumour have been supposed to be characteristic of hydrocele; but neither of these symptoms are perceptible in a hydrocele of some duration, from the thickness and tension of the vaginal coat, or from an admixture of coagulated blood with the effused fluid.

The hydrocele of the vaginal coat is an uniform swelling, which begins in the lower part of the scrotum, and gradually extends upwards to the under abdominal aperture: the spermatic cord above the tumour may be perceived of its natural size above, but with difficulty behind the tumour. There is no derangement of the functions of the alimentary canal, and the bulk of tumour, which has an uniform feeling when pressed, does not vary in different positions of the body.

7th, An inguinal hernia may be mistaken for an enlargement of the veins of the spermatic cord.

This kind of tumour, like a hernia, increases in bulk on coughing, becomes much less when the patient lies on his back, and sometimes can be pressed into the abdomen: the swelling begins in the lowest part of the scrotum, and ascends gradually.

The above diseases may be distinguished in the following manner. In both cases, the tumour disappears whilst the patient is in bed. If pressure be made whilst the patient is in that situation, upon a hernia, the tumour does not reappear when the patient gets up; whereas, if the enlarged spermatic veins cause the swelling, in consequence of the pressure impeding the return of the venous blood, and not interrupting the flow of blood by the spermatic arteries, the tumour attains a considerable bulk.

8th, A scrotal hernia which sometimes originates from external violence, may be mistaken for the effusion of blood within the vaginal coat, or within the body of the testis. But in the latter case, the tumour does not become larger upon the patient coughing, is accompanied by a sense of weight, and communicates a very peculiar sensation when pressed: the spermatic cord at the under abdominal aperture is not involved in the swelling, and the skin over the tumour has a red colour.

Upon the whole, the inguinal hernia may be distinguished from other swellings at the groin, by attending to the origin and progress of the disease; by observing that the swelling is first perceived at the groin, and that it is observed to pass into the inguinal canal. These marks, combined with the other symptoms already enumerated, characterise the common inguinal hernia.

We are much surprised that encysted hydrocele of the cord has not been enumerated by our author in the foregoing list of diseases likely, or at least liable to be mistaken for inguinal hernia. It is one which

has been and frequently is a source of difficulty to surgeons of much experience, and ought certainly to have been mentioned on the present occasion. Dr. Monro might likewise have pointed out the complications of inguinal hernia more at length, we mean its complications with one or more of the foregoing maladies. For instance, we witnessed a case where a small inguinal intestinal hernia was mixed up with varicocele and hernia humoralis. It would be difficult to describe the additional obscurity and complexity thrown on the diagnosis of the case in the first instance by this mixture of diseases. As the *diagnosis* of the complaint is thus a matter of such paramount importance, we pass to that of

Femoral Hernia.

On account of the very small size and flatness of the tumour in crural hernia, and laxity of the skin and fat, it is often very difficult, by pressure with the fingers, to discover the disease, or to ascertain the nature of the contents of the tumour. Another cause of difficulty is the vicinity of the tumour to the neighbouring lymphatic glands.

"A swelling of the inguinal lymphatic glands bears a very strong resemblance to a crural hernia which contains omentum. Besides, some of the smaller inguinal glands frequently cover the hernial tumour. In both the above cases, the hernial tumour has not its usual characters, elasticity and smoothness of surface.

The hernial tumour commonly appears suddenly after some violent exertion, as after raising a heavy weight, or from a fit of coughing, or vomiting, and increases or diminishes in bulk by pressure, or when the patient goes to bed.

In many cases of crural hernia, the tumour is so small, that an opinion is formed respecting the nature of the disease, rather from the concomitant symptoms than from the appearance of the tumour.

Symptoms of strangulation coming on, remove all doubt respecting the nature of the case.

Notwithstanding these and other marks of distinction, crural hernia has been mistaken for scrofulous enlargement of the inguinal glands, or a venereal bubo, for a hernia."

Our author met with "a puzzling case" at his Dispensary. A girl presented herself with a very painful swelling in the groin which she said had appeared suddenly. As, however, it was not situated exactly over the crural ring, and neither occasioned sickness or costiveness, the nature of the case was determined to be scrofulous. We confess that we see nothing very puzzling in this, unless the diagnosis of ordinary bubo in the groin be considered a matter of some mystery. Certain we are that we never saw a girl so affected who did not *say* that the tumour came suddenly after a blow, or without one. "Getting over a stile" is a constant cause of venereal buboes in the young women who apply at St. George's Hospital. Enlarged glands in the groin, have, notwithstanding, been mistaken for hernia by very good surgeons. A laughable exemplification of this blunder occurred, some years ago, in a hospital in this metropolis. The surgeon cut down upon the tumour secundem artem and with great precision, when all at once an indurated lymphatic gland, released from the pressure of the fascia and its cellular sheath, popped out to the other side of the operation-room, and the hernia was no where to be found. To revert to our author, we are informed that Mr. Else met with a femoral hernia placed behind a swelled suppurating lymphatic gland of the groin. We know ourselves of one or two cases of such complication where the operation was rendered extremely difficult and confused. "The diagnosis becomes still more obscure, if suppuration shall have taken place in the enlarged lymphatic gland, and also where the hernial tumour is composed of several small sacs; or when an empty hernial sac or hydatid covers the more recent hernial tumour, or when the displaced intestine is included in a double sac."

A quantity of fat, or a collection of hydatids on the inner side of the groin, bears

some resemblance to a herniary tumour, as the watery fluid within the elastic coats of the hydatid, communicates to the touch nearly the same sensation as a protruded portion of intestine.

In the Museum of the University of Edinburgh, there is a sac, the size of a hen's egg, and containing a quantity of hydatids, which was removed from the upper and outer parts of the thigh.

Lumbar abscess may be very readily mistaken for a crural hernia; as it becomes larger when the person coughs, and also more tense in the erect than in the horizontal posture.

The characteristic symptoms of lumbar abscess are inflammation in the side or loins, followed by symptoms which indicate the formation of purulent matter, viz. pain, increased on motion, with slow and gradual increase of the tumour, the limits of which are not well defined; fluctuation of matter felt, on alternate pressure being made on the loins, or lower part of the abdomen, and upper and inner part of the thigh when the swelling is examined alternately in the erect and horizontal posture.

A crural hernia of a large size, or when reflected upon the crural arch, is often placed obliquely, as such a hernia covers the under abdominal aperture, and its neck being compressed, and somewhat resembling the spermatic cord, it may be mistaken for an inguinal hernia.

A crural hernia is sometimes reflected upwards and outwards, sometimes upwards and inwards.

In order to ascertain the nature of the hernia, it sometimes becomes necessary to press downwards the reflected part of the swelling; and by grasping Poupart's ligament over the crural aperture the herniary tumour may be traced to the crural aperture. But this cannot always be done when the disease has been of some duration; as, during the progress of the disease, the tumour may be retained in its unnatural situation by adhesions.

A circumscribed varix or swelling of that part of the femoral vein which is next to the crural arch expands when the patient coughs, becomes much less in the recumbent, and expands in the erect posture, and hence has been mistaken for a crural hernia, to which it may bear a strong resemblance.

A swelling occasioned by such a cause, may be discovered, by making pressure upon the vein above the crural arch, so as to prevent the return of blood: thus the varix by distention, is rendered more prominent.

On account of the small size of the crural aperture, and unyielding nature of its parts, considerable pressure is made upon the neck of a crural hernia, which is sometimes succeeded by thickening and induration; and, for a similar reason, the mucous and muscular coats of the displaced intestine have been in some cases, ulcerated on the side next to the edge of Gimbernat's ligament.

There is also less chance of returning the contents of a crural than of an inguinal hernia, and strangulation more speedily takes place in the former than in the latter; this points out the danger of postponing beyond a few hours the operation after the symptoms of strangulation appear, and when venesection, the warm bath, and a tobacco clyster, have proved of no avail.

The foregoing remarks on inguinal and femoral hernia though containing nothing very novel in detail are yet well worthy the attention even of the experienced portion of our readers. We are convinced that we cannot do a better office to our brethren, than warn them from time to time of the errors to which they are liable in practice, especially in that of surgery. How many a reputation has been injured, nay blasted, by a slip in the diagnosis of hernia!

IX.

OPINION OF ENGLISH MEDICAL POLITICS ENTERTAINED BY FOREIGNERS.

Men of all parties, and in all countries, have looked with great curiosity towards the opinions entertained of them by strangers, by foreigners who could have no bias in fa-

vour of one sect or party rather than of another. This curiosity is no doubt strengthened by the consciousness that, if justice or candour is to be found at all, it is more likely to come through a neutral channel than in any other way. Our transatlantic brethren cannot possibly have any feeling in favour of any party in the body politic of medicine here—or if there should be any leaning at all, it must, for obvious reasons, be towards the democratic part of the profession. Let us hear what they say and think of us at a distance of three thousand miles from our modern Babylon. The following extracts are from a long and extremely well-written article, in the Boston Medical and Surgical Journal, for July 1828.

After alluding to the great number of medical men collected together in this metropolis, and the necessary or unavoidable collisions of interest or rivalry that must occasionally take place, the Editor goes on thus:—

"Such a community can never be without its dissentions, contests, and hostilities. Still as these were not alluded to in the public journals, they were unknown beyond the limits of the city, and probably of the hospital or district in which they existed. Within a few years, a new state of things has arisen. A journal was established — the Lancet—the proposed object of which was Medical and Surgical Reform. Abuses, it was asserted, had crept into the management of medical institutions — monopolies existed—ignorance and incompetence were in places of trust and honour—'preferment went by favour and affection.' The Editor of the Lancet was to perform the Herculean task of cleansing away the Augean filth which had accumulated. He established himself as the censor of the medical world; employed himself in prying into the intimate causes of all the evils he pointed out, and was to bring to light and expose in open day, all who in any way were interested in, or promoted the abuses which existed.

"That abuses did exist, that the profession have been roused to a sense of their pernicious influence, and that effective steps have been taken towards their remedy, cannot be doubted; neither, we think, can it be well denied that the influence of the Lancet, in this particular has been beneficial. Neither can it be doubted that, by keeping a watch over the conduct of the individuals having charge of the public institutions, it has awakened them to a more thorough performance of their duty. The knowledge that even inadvertent and unavoidable errors would be exposed and dwelt upon with scrupulous malignity, must make such persons particularly cautious and attentive in the performance of their public duties. Besides, by the publication, in the Lancet, of Lectures of teachers and of the hospital reports of the whole city, unfair as they often have been, and coloured and distorted for particular purposes, a great mass of valuable professional matter has been circulated; and what is better, the fashion of publication has been set, which will be followed to the manifest advantage of the science.

"It is right to give credit where it is due, and it must be admitted that to this extent the influence of the Lancet has been beneficial. Yet we doubt whether even this much has proceeded from the pure desire of doing good. The temper, spirit and motive of this journal appears to be radically bad. It is vulgar, low and abusive. If it cries down abuses, it seems actuated more by a hatred of those who benefit by them, than from any proper love of right and justice. Its malignity has been chiefly directed against what may be called the aristocracy of the profession; that is to say, against those individuals, who, by their talents, opportunities, patronage, or any other causes, have become eminent in public opinion as professional men. The characters and conduct of these individuals are attacked without reserve, and assailed in the most indecent language. Their practice at the hospitals, their operations, their writings, are criticised unsparingly. And, what is worse than all, those unfortunate and unsuccessful occurrences in practice, which occasionally fall to the lot of every practitioner, are seized upon with

avidity, dragged out to public notice, represented in the most unfavourable light—the practitioner accused of ignorance and want of skill, and held up as an object worthy of public indignation.

"It will not be amiss we think to present to our readers a few examples of the style in which these attacks are made. It will be instructive, and may serve to warn us from giving in, in any degree, to that spirit of jealousy and detraction which has been said to be characteristic of our profession. It is also an important fact in the medical history of our times, that a journal conducted in such a spirit, should have acquired and maintained so extensive a popularity, and exercised so great an influence in the most enlightened city of the world. Many in the profession have, as it appears, actually stood in awe of this common libeller, for all who have had the independence and spirit to stand out in open hostility, have been immediately made the subjects of its attacks."

The editor goes on to give a great variety of samples of eloquence from the Lancet, as directed against Dr. M'Leod, Mr. Travers, Mr. Earl, Mr. Brodie, Mr. Bransby Cooper, and others—overlooking, we know not why, the delectable morsels of abuse that have been so often showered upon our own heads. He then remarks:—

"We do not introduce these quotations to amuse our readers, or to gratify that propensity for listening to slanderous tales, which exists too strongly, even in the best of men; but for the purpose of displaying the temper and spirit of which we have spoken. Even the rival journal, the London Medical Gazette, although professedly established for the purpose of putting down this temper, has, sometimes, not a little given in to it. Mr. Lawrence is the surgical hero of the Lancet, who can do nothing wrong. Mr. Lawrence accordingly becomes the object, not indeed of thorough Lancet-like abuse, but of something approaching to it, in the columns of the Gazette."

Mr. Bransby Cooper's operation is next taken up, for the trial had not then taken place, and the statement in the Lancet, even when there was but one side of the case before the public, is treated with feeling of just indignation.

"But the most gross violation of decency, and of offence against manly and generous feeling, by the Lancet, occurs in the account which it gives of a late unfortunate operation for stone by a nephew of Sir Astley Cooper at Guy's Hospital. This account, as it made a great sensation in the medical world, and is likely to be made the subject of a judicial investigation, we quote entire."

Then follows the theatrical representation enacted by manager Lambert, with the American commentary.

"Whatever may have been the faults of the operation, or the blunders of the surgeon, no man of proper feelings can regard with any thing but unqualified disgust, the air of malignant triumph with which this unhappy case is dwelt upon: and the various measures taken by the students who witnessed the transaction, and by other surgeons, indicate a strong sympathy with Mr. Cooper, and a just indignation against his libeller."

"But to proceed no farther in this humiliating exposition, we have only to add as evidence of the state of things produced by this publication, that within less than a year three suits at law and a duel have been brought about between medical men wholly by the influence of the Lancet. Now whatever good ends may have been held in view and attained, the means must be bad which lead even indirectly to such consequences as these.

"Yet we believe, not only as a matter of duty, but *even of policy*, that it is wise to cultivate kind and friendly feelings towards those who come most directly across our paths, and always to speak of them in the most favourable terms that strict regard to truth will allow; never to take advantage of those accidents and adverse occurrences which happen in practice to the most accomplished and successful men, to create prejudice against others, but on the contrary distinctly to impress the opinion, that from

the nature of the art such occurrences are inevitable. We believe that those who candidly and honestly pursue this course will find their account in it. It will produce not only more kindly feelings towards them, and a greater confidence in them among their professional brethren, but a more desirable and permanent reputation in the public at large; and afford them a degree of happiness, which success, with an opposite temper, could not give.

"We sincerely believe that no such spirit now exists in this country as is evinced in the publications we have been speaking of. But it by no means follows that such a state of things may not arise, and it becomes those who are looked up to on account of their age or eminence, and who have a proper regard to the honour of their profession, to set an example of candor, moderation and liberality, which cannot fail to have the most salutary effects."

Every honorable man who has the interest of his profession at heart, or who is imbued with any of the better feelings of humanity, will join in the excellent advice and wise precepts of our transatlantic contemporary, whose sentiments do honour to his country as well as to himself. It may be gratifying to him to know that the influence of the "common libeller" is gone for ever, in this country—and well that libeller knows it! The hallucination is passing fast away from the medical profession of these Isles, though not before its members became the subject of astonishment, and too often contempt, among their brethren in other countries. The violence of the infatuation has soon exhausted, and consequently cured itself—and the instrument which once created awe among the timid, is now looked upon with as much indifference, if looked upon at all, as the log thrown down by Jupiter was eyed by the croaking tribe, after the splashings had subsided.

X.

INTERESTING CASES OF APOPLEXY. By Dr. ABERCROMBIE.*

Much has been published on the pathology of apoplexy, and yet what obscurity still shrouds the rationale of many cases of that dreadful disease. Many well-informed professional men appear to imagine that organic lesions are always found after death to account for the symptoms and event. They talk, and too frequently act, as if extravasations or morbid accumulations of blood or serum, were the necessary and constant conditions to be met with. If an instance to the contrary is mentioned, it is met by scepticism, or the observation, that "had the dissector looked more sharply, something would have been found." This is a dangerous error, not only to the parties themselves but to their brethren, and one which we have done our best on several occasions to dispel. The following short and authentic case, detailed by Dr. Abercrombie, is calculated to make a strong impression on the minds of the gentlemen to whom we have alluded. It occurred under the care of Dr. Duncan, in the clinical ward of the Royal Infirmary of Edinburgh, in May, 1829.

Case. "A man, æt. 54, short-necked and of plethoric habit, was admitted into the Clinical Ward on 30th May. He was in a state of nearly perfect coma, speechless, and with palsy of the right side to such an extent, that even the intercostal muscles of that side did not act. The leg and arm of the left side were occasionally affected with convulsive motions. Breathing stertorous—deglutition much impaired. Pulse 74. The affection was of three days' standing, and had come on with vertigo—loss of vision—violent head-ach and vomiting.

"All the usual remedies were employed in the most judicious and active manner without benefit. On the 1st of June, there seemed to be a slight return of intelligence,

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* On the Brain. 2d Edit.

but he soon relapsed into coma, and died on the 3d, without any change in the other symptoms.

"*Inspection.* A most minute and careful examination was made of the brain, without discovering any appearance of disease, except that the choroid plexus seemed rather darker than usual, and the basilar artery was diseased at one spot. By the side of the artery, there was a spot of the cerebral substance, no larger than a barleycorn, which appeared somewhat softened, but even this Dr. Duncan considered as extremely doubtful."

If we might trust our own observation, we would say that hemiplegia is more frequently connected with local pressure or structural alterations than general paralysis and coma. So many exceptions, however occur to these general rules, if rules they can be called, that they must always be received with reservation. This very day we witnessed the examination of a patient with disease of the heart, who had suffered from hemiplegia, and in whom there was nothing found to account for that affection. In another case which occurred during last Autumn, there was apoplexy, with some hemiplegia of the right side, and yet no satisfactory morbid appearances were discovered in the brain or elsewhere. The case was that of a gentleman who came over from Ireland to transact commercial business in town, was seized in the manner we have mentioned, and died in the course of four days. The dissection of the brain was conducted by Dr. Hodgkin, and it may well be believed that it was not done carelessly.

II. RAPIDLY FATAL CEREBRAL DISEASE.

It is known by most practitioners, that instances of very sudden death are commonly dependent on diseases of the heart and great vessels rather than on apoplexy. But it must be recollected, that even the latter will occasionally prove fatal in almost as short a space of time as the rupture of an aneurismal sac of the aorta, or the snap of the vital chain in certain affections of the heart.

Case. "A woman, aged 54, who had been for several years liable to headach, attended a crowded meeting on the evening of 25th of June, 1829, and seemed in perfect health. Towards the conclusion of the meeting she uttered a loud and convulsive scream, and instantly fell down in a state of insensibility. She was immediately carried out and was seen by Dr. Macauley, who happened to be present; he found her pale and totally insensible, and the pulse feeble: and within five minutes from the first seizure she was dead.

"*Inspection.* The integuments of the head were much loaded with blood. On removing the dura mater, there was a thin but very extensive appearance of extravasated blood, or rather ecchymosis, which covered nearly the whole surface of the brain. In the substance of the anterior lobe of the right hemisphere there was a coagulum of blood the size of a large bean. All the other viscera were examined in the most accurate manner, but nothing was discovered, except a tubercle on the liver, and a small spot of ossification on the abdominal aorta."

III. EXTRAVASATION IN THE TUBER ANNULARE AND IN THE THECA VERTEBRALIS.

When the extravasation takes place about the cerebellum, the symptoms appear to be more rapid than when it attacks the substance of the cerebrum. We think we have observed that pressure, if not considerable, about the pons varolii or medulla oblongata is more apt to produce convulsions than when seated elsewhere. If, however, the pressure be great, convulsions do not occur, but the fatal issue is precipitated.

Case. "A gentleman, aged 37, had been for several months in bad health, being affected with occasional tightness of the chest and difficulty of breathing. He had also severe dyspeptic complaints, with occasional vomiting, a yellow tinge of his skin, and considerable uneasiness in the region of the liver. For these complaints he had been advised by his medical attendants in the north, to

go to Cheltenham, and arrived in Edinburgh with that intention on 22d March, 1828. I saw him on the following day along with Mr. Wishart. We found his pulse frequent, his countenance sallow, and his expression febrile and anxious. He complained chiefly of tightness across his chest, with some pain in the region of the liver. Respiration was very imperfect along the right side of the thorax, and there was some œdema of the legs. By topical bleeding, purging, &c. he was considerably relieved; and on the 24th he expressed himself as feeling much better, but his pulse continued frequent. On the morning of the 25th he was suddenly seized with giddiness, noise and confusion in his head, and numbness of the whole right side. He was oppressed, but not comatose; answered questions distinctly, but in a loud voice, and with a peculiar manner. He complained chiefly of noise in his head, of a tight and cramped feeling of his right arm and leg, with much pricking and loss of command of the parts, but when desired to grasp another person's hand with his, the muscular power did not seem to be diminished. The expression of his countenance was vacant and fatuous: the eye was natural. The face was slightly distorted, and the speech was in some degree embarrassed. The pulse was 120."

After large bloodletting and the other usual remedies, the symptoms gradually assumed a more favourable aspect, and after four or five days, he was considered as being out of any immediate danger, though the effects of the attack were by no means removed. His pulse was now natural, his speech was distinct, and his mind entire; his sight was good, and the appearance of the eye natural, except a slight degree of paralysis of the upper eyelid of the right side. His breathing was easy, and he made no complaint, except of the tight and cramped feeling with numbness of the right arm and leg. His look, however, continued vacant and peculiar. His appetite and digestion were good, and his bowels easily regulated. He was improving in strength, and was able to be out of bed part of the day. This favourable state continued till the 14th of April, on which day he was found with a very frequent pulse without any other change in the symptoms. This febrile state continued on the two following days with rapid failure of strength, and he died on the evening of the 16th. He continued sensible to the last, and during this febrile attack, he seemed to have acquired an increased command over the limbs of the affected side. About the commencement of his illness of 25th March he complained of considerable uneasiness in passing his urine; for a day or two it was bloody, and there was a good deal of tenderness in the region of the bladder. After a few days this subsided, and he began to pass considerable quantities of puriform fluid of remarkable fetor, which subsided to the bottom of the chamberpot, after the urine had stood for a short time. This continued during the remainder of his life, though it had greatly diminished in quantity for several days preceding the last febrile attack. The urine was in sufficient quantity, and passed without difficulty.

"*Inspection.*—The brain and cerebellum were found in every respect in the most healthy state, and no vestige of disease was discovered until the cerebellum was separated from the tuber annulare. In doing so a cavity was exposed about the size of a large hazel nut, lined by a soft cyst, and full of dark grumous blood of a firm consistence. This remarkable cavity was formed partly in the substance of the tuber, and partly betwixt it and the base of the cerebellum. It was decidedly more to the left side than the right, and the surrounding substance was softened, and tinged with dark red points, as if from injection of dark blood. There was effusion in the thorax to the amount of at least lb. ii. The right lung was contracted and extensively hepatized; the left was much loaded with sero-purulent fluid. The liver was very considerably enlarged and of a pale-ash colour and granular texture. The left kidney was pale, indurated, and tubercular. The inner surface of the bladder

was deeply injected, and in several places shewed distinct round ulcers about a quarter of an inch in diameter."

The foregoing is a very interesting case, but we regret that no mention is made of the state of the heart. The connexion, first pointed out by the French, between hypertrophy of the left ventricle and a morbid state of the vessels of the head, so frequent a concomitant or cause of apoplexy, is one that we have very frequently observed. Indeed we remember but two or three cases of opacity and induration of the basilars or carotids to any extent, unaccompanied by cardiac hypertrophy. On the other hand, when patients die of idiopathic hypertrophia of the heart it is extremely rare to find the vessels of the head or the aorta quite free from the atheromatous deposites. The subject is too extensive for us to enter into here, but we would earnestly intreat practitioners when investigating the morbid anatomy of apoplexy, to extend their researches to the heart and blood-vessels, instead of confining them merely to the brain. In the succeeding case the extravasation was very extensive.

Case. "A boy, aged 9, previously in perfect health, awoke in the night of 18th May, 1829, complaining of headach; had vomiting and slight convulsion. On the 19th, he was seen by Mr. W. Brown, who found him still complaining of headach with occasional vomiting, but without any urgent symptom. Under the usual treatment the complaint seemed gradually to subside, and on the 25th he appeared to be entirely recovered. But on the afternoon of that day, he had a return of convulsion, and in the evening complained much of headach. Pulse 64.—26th and 27th, said he was better but seemed drowsy. Pulse slow. Bowels obstinate. 28th, had two attacks of convulsion, the second of which was very severe and continued for several hours; affecting chiefly the left side of the body. Pulse 130. On the 29th he was again better; but from this time he became gradually more and more drowsy, and at last comatose with squinting, and occasional convulsive motions of the limbs, and he died on the 3d of June. His death was preceded by severe convulsion of several hours duration. I saw him along with Mr. Brown from the 29th.

Inspection.—The surface of the brain was healthy. The lateral ventricles were distended with dark bloody fluid, and each of them contained a mass of coagulated blood; that in the right was the size of a large walnut, the other smaller. The 3d and 4th ventricles were quite filled with coagulated blood in a very firm state, and from the bottom of the fourth ventricle, the coagulum was traced outwards and spread along the base of the brain and cerebellum, and around the medulla oblongata. The spinal canal being now laid open, the dura mater of the cord appeared remarkably distended, and the cord was found through its whole extent entirely enveloped by a very firm and uniform stratum of coagulated blood. The brain and cord were in their substance healthy, and the source of the hæmorrhage could not be discovered."

Dr. Abercrombie remarks on the foregoing case that it presented the most extensive extravasation of blood which he has ever met with. It is also curious "from the period of life at which the affection took place, and its similarity in the symptoms to one of the common inflammatory affections terminating by effusion."

IV. EXTENSIVE DISEASE OF THE LEFT HEMISPHERE OF THE BRAIN.

The following is a good example of the kind of symptoms attendant on chronic disorganization of the brain. Scarcely ever amounting to evidence beyond conjectural, the practitioner is frequently thrown off his guard, and pronounces the case to be dyspepsia, hypochondriasis, or hysteria, till a paralytic or an apoplectic seizure rights the diagnosis in a melancholy way. The case to which we proceed was communicated to Dr. Abercrombie, by his able friend Dr. Kellie of Leith.

Case. "A medical gentleman, aged 56, of a cultivated mind and temperate habits, had

been for some time liable to various ailments, which his medical friends considered as in a great measure hypochondriacal. The most defined complaints were occasional uneasiness in the site of the frontal sinus, and a very peculiar feeling of numbness in the point of the thumb. But his general health appeared good, and he was able to enter into all the usual enjoyments of life, having retired from practice, till he was one day seized, while walking, with sudden sickness and faintness. These were followed by some headach, and an obvious difficulty of articulation, or rather a difficulty in finding the expression which he wished to make use of. He was now treated by bleeding and the other usual means; but this peculiar loss of the recollection of words continued and gradually increased, so that he had greater and greater difficulty in recollecting the words which he meant to employ, but he had no difficulty in pronouncing them. His understanding at this time was quite entire; his pulse varying from 80 to 112. He was nearly confined to the house, but out of bed during the day; and all the usual remedies were employed in the most assiduous manner. After he had gone on in this way for several weeks, he began to have slight distortion of the mouth, and complained of numbness of the right arm, and soon after of weakness of the right leg. These symptoms gradually increased to perfect hemiplegia; and about this time, also, he entirely lost his speech. He was now confined to bed, but without coma. He had the perfect use of his sight and hearing, and, as far as could be judged, his understanding was entire. He died with symptoms of bronchitis in the ninth week from the first attack.

Inspection.—The left hemisphere of the brain was found to be diseased throughout in a very singular manner. Some parts of the mass were indurated, others softened; and it presented a variety of colours, chiefly a rose-colour, grey, and yellow; and the more diseased portions were highly vascular. In some places there were distinct insulated masses, inclosed in vascular cysts; these were generally indurated, but some were softened, and they were of a rose or flesh colour passing into grey. The change from those parts which retained a natural appearance to these degenerated portions was abrupt, and marked by a rose-coloured line. These rose-coloured portions were chiefly in the parts nearest the surface; in the central parts this passed into the yellow or the grey, and many portions were in a state of ramollissement. The whole left hemisphere, in fact, presented little else than a mass of concentric indurations and softenings of the various colours which have been mentioned. On the upper part of the hemisphere, the disease did not extend entirely to the surface of the convolutions; but at the base of the anterior and middle lobes it extended to the surface, and at one place there was a well defined spot of superficial ulceration the size of a split pea."

A few more articles will enable us to get through the additional cases in this edition of Dr. Abercrombie's work. The use we are making of it proves the estimation in which we hold it, and were the plan of our author adopted generally in the construction of medical writings, the public, the profession, and the science of medicine would be greatly the gainers. Nothing remunerates us for the unpleasant task of scraping the tinsel from the productions of professed book-makers, save the pleasure we experience in meeting with works of genuine merit. Would Dr. Abercrombie wish us to say more?

XI.

SEAT OF THE SOUL.

We are afraid that, between "medical physics," and "medical metaphysics," *common physic*, by which so many of us "live, and move, and have our being," will fall to the ground! We all know the disputes that have existed respecting the seat of the soul, the MIND, the INTELLECTUAL PRINCIPLE, or

whatever other name we choose to apply to that *divinæ particula auræ* which is the boast of proud man. Most people, however, imagined that the brain was the seat of thought and the throne of intellect—probably from the vulgar fact that, whenever the brain was removed, by accident or design, all intellectual operations ceased—at least as far as MAN is concerned. It was reserved for the year 1830, to discover that a man, or, at all events, a woman, may live, and think, and shew the highest exertions of intellect after the seat and the source of the mind is removed. Dr. Pring, of Bath, in his recent work on the "intellectual and moral relations," has shewn a wonderful "alacrity at sinking," by precipitating the seat of the soul, and "origin of mind," from the pineal gland, or other portion of the encephalon, down to that infernal region, the PELVIS, and locating it (as brother Jonathan would say) in the ovarium!—Really the air or the waters of BATH seem to have a most powerful tendency to the BATHOS. But we must let the brilliant ovarian hypothesis be *delivered* (cross-birth or breech-presentaiton as it is) by the crotchets of the author.

"Supposing it to be conceded, that the mind, like the vital properties which subserve organic purposes, is derived from parents; in the case of the maternal ovum, to which our considerations are now chiefly confined, the following modes may be suggested by which the intellectual principle is possessed by this rudiment: either, first the ovum is endowed with mind by a local function of the ovarium, in which it is produced; or, second, this seat (the ovarium) is a centre, to which the maternal properties tend, whether those of the intellectual, or of the organic system.

"Without discussing these alternatives at any great length, it may be observed, that if the formation of the ovum were the result merely of a local function of the ovarium, there is no reason why peculiarities of parents, possessed by distant seats, should be perpetuated in the offspring; and the participation of the offspring in such peculiarities, seems a sufficient proof, that the endowments of the ovum are not merely from properties of the ovarium, but that they are communicated from all parts of the parent; and that the ovum is a miniature representation of the properties both of the organic, animal, and intellectual systems, which occupy respectively the structures of the parent."

There is one difficulty attendant on this hypothesis—but what hypothesis is free from difficulties?—and that is this. As our original progenitor, ADAM, had neither ovarium nor ovum—and as these bodies have never since been discovered, except on very rare occasions, in the bodies of men, it is very difficult to account for the features, the propensities, and the moral or physical qualities of the father in the child. If the ovum be a "miniature representation" of the properties, propensities, &c. of the parent, it follows that we are all the veritable descendents of mother EVE *alone*, and consequently inheritors of *her* propensities—Adam having no ovaria. Upon mature consideration, we are inclined very much to favour Dr. Pring's hypothesis. EVE was evidently the origin of SIN—for poor ADAM was merely a second-hand performer in the drama of the Serpent and the Apple: and as SIN has characterized the whole of the hopeful progeny, from Mother Eve down to Mother ——— in Chandos-street, Dr. Pring has now furnished us with a KEY to the whole mystery!

CLINICAL REVIEW.

XII.

ST. GEORGE'S HOSPITAL.

UMBILICAL HERNIA—"ASTHMA"—DROPSY—OPERATION—DEATH—ENORMOUS HYPERTROPHY OF THE HEART.

The following case which occurred very lately at this Hospital is interesting alike to the surgeon and the physician, and very important in a practical point of view.

Case. Thomas Clark, æt. 60, a publican residing at Knightsbridge, admitted Jan. 4, 1830, under the care of Mr. Keate.

Present symptoms are;— dyspnœa—orthopnœa—cough in "asthmatic" paroxysms —no pain in chest—no palpitations of the heart — occasional flatulence — œdema of lower extremities — body very fat — face bloated, and somewhat anxious — mind rather confused. Pulse regular, slightly jarring; skin warm; tongue moist, whitish; bowels not open this morning; urine very scanty.

Belly of enormous size, chiefly from fat, with an indistinct sense of fluctuation. At the umbilicus is a protrusion nearly six inches in diameter every way most prominent at the upper part and right side, flattened in the centre in the situation of the navel and for a circular space about two inches in diameter. It is generally soft, with harder portions, and has all the characters of an umbilical hernia, partly intestinal and partly omental. Integuments not discoloured, except in the circular flattened space alluded to, where they are brown from the long continued pressure of a truss. Tumour slightly painful on pressure, which occasions a sort of guggling within it, but does not in any degree reduce its bulk. Some little tenderness on pressure of the abdomen in the neighbourhood.

In the right groin a large scrotal hernia, chiefly, if not entirely, intestinal, and easily reduced; besides this, a slight hydrocele of the tunica vaginalis on this side.

On examining chest with stethoscope the lower part of either lung presents a very imperfect respiratory sound, with a small sibilant *râle;* respiration in upper parts of chest attended with louder and more mucous sound than natural. Heart's action attended with more impulsion than there should be, but the excessive quantity of fat and the noisy respiration obscure the cardiac indications. No bruit above right clavicle, or evidence of dilatation of the aorta.

Patient says he has laboured under the "asthma" since August last, but the friends affirm that he has suffered from it in a mild degree for eighteen months. Has had the orthopnœa, more or less, since September, but only to a distressing degree for a week or two. Scrotal hernia has existed as long as he can recollect—the umbilical about sixteen years. Has worn a truss for the latter, but been unable to reduce it entirely for some time. A week ago it was the size of an orange, and he procured a fresh truss from Salmon and Ody. Has passed his motions up to within the last 36 hours, but they seem to have been scanty. For the period mentioned he has had no stool, and has been treated for strangulated hernia by bleeding; castor oil, which he vomited; and an enema exhibited at 3 o'clock this morning, which has not yet returned. Previous to these hernial symptoms he has enjoyed pretty good health, with the exception of occasional attacks of gout and his asthmatic complaint. He has eat and drank immensely.

V. S. ad syncopen (in upright posture).

After the bleeding, which the patient bore well, the taxis was carefully employed by the house-surgeon, Mr. Smith, but without making the least impression on the tumour. At 5 p. m. the surgeons again met in consultation. The tumour was now larger and somewhat more painful; the patient also

complained of a little more pain in the abdomen, and had had no stool. It was determined to administer the tobacco glyster, which was done under the direction of Mr. Smith, with the effect of producing considerable but not alarming faintness, and violent vomiting of dark brown matters, apparently stercoraceous. The taxis was again employed with the same ill success as before.

At 9 p. m. the surgeons met again. The tumour was now extremely tense and tender upon pressure, but the integuments not discoloured — the belly more tense and tender — countenance rather more anxious — pulse full—skin moist—bowels not opened—dyspnœa relieved. The operation was instantly proposed to the patient, acceded to, and performed by Mr. Babington in the unavoidable absence of Mr. Keate.

We need not describe minutely the steps of the operation; suffice it to say that a crucial incision of the integuments covering the tumour was made, and the sac cautiously opened on the director. Omentum only was exposed, and that so generally and in parts so closely adherent to the sac, that great caution was required in clearing a way for the bistoury to the seat of the stricture, that is to the neck of the sac. This was divided directly upwards by the hernia knife. The omentum not being in the least degree discoloured or injured, a strict search was made for any portion of intestine which could possibly be included within it. Such a portion of ileum doubled sharply on itself, about six inches in length, and of dark port wine colour, but not deprived of vitality, was discovered in the centre of the mass of omentum. It was drawn out, and no circular mark of a stricture seen upon it, but yet it could not be reduced without making a second incision upwards with the hernia knife, and apparently dividing some omentum. The gut was then reduced, but what to do with the unwieldy lump of omentum? To attempt to return it, adherent as it was, was out of the question; to leave it in situ was as bad. The greater portion was accordingly removed, each bleeding vessel being tied as divided. The portion lying at and abdering to the neck of the sac was left, partly to serve as a plug, partly to prevent any retraction of the remaining omentum into the belly and bleeding into that cavity. The flaps of integument were brought together by suture; lint, compress, and roller applied; and the patient, who bore the whole very well, removed to bed. The operation was necessarily tedious, but it is barely justice to Mr. Babington to mention the great caution and skill with which it was conducted. After its completion serum in some small quantity oozed from the abdomen through the wound.

Soon after the patient's removal to bed he slept quietly for three hours, and expressed himself greatly relieved throughout the night. At 4, a. m. of the 5th, he took ten grains of calomel, and soon afterwards a saline injection was thrown up. At 10, a. m. when seen by the house-surgeon, there was some dyspnœa, pulse about 116, tongue moist and clean — constant oozing of water from the abdomen, but no tenderness on pressure —no motion from the bowels.

We saw him at 1, p. m. and the symptoms had evidently altered for the worse. He was flighty, anxious, restless—pulse 100 and jerky—tongue becoming dryer and red at the tip—decided abdominal tenderness—still no motion. At 2, p. m. he was ordered:—

Rep. hyd. sub. gr. x. *Post horas tres ol. ricini*, ℥j.
Hirud. xviij. *abdomini.*

The leeches bled freely but gave no relief, the medicines were retained but procured no evacuation, and at 6, p. m. he was again evidently altering, and that rapidly for the worse. The flightiness had merged into delirium, the tenderness of the abdomen into decided pain increased by the slightest cough, which he hushed and smothered. Pulse 130, small, inclined to waver—tongue dry in centre, red at tip and sides—no motion. The symptoms of sinking quickly made progress, the usual means were employed with the usual success, and the patient died at half past ten o'clock that evening, exactly twenty-four hours after the operation.

Sectio Cadaveris. Body enormously loaded with fat—legs still œdematous—face stained with stercoraceous vomit.

Abdomen:—Patches of inflammatory injection in the peritoneum lining abdominal parieties and viscera—very little serum—a little lymph, and that only in pelvis. No intestine included in the sac—amongst the convolutions of the ileum, a dark portion about six inches long, evidently that which had been liberated from the hernia. It was bent sharply and abruptly on itself, and the contiguous sides were firmly united by recent lymph. In consequence of the abrupt angle thus made by these two portions of the adherent gut, the channel for the passage of its contents was much narrowed by the kind of *épuron* or buttress, formed by the united parietes alluded to. The peritoneal and muscular coats of the intestine were much inflamed and very dark, the mucous was very little altered. The inflammatory appearance of the outer coats was most intense at the point where the gut made the turn upon itself, and from that it gradually passed away.

Nothing particularly deserving of notice about the omentum or the sac; the stricture had been freely divided. Inguinal hernia of the common kind; sac at present empty. Liver pale, soapy, and that of a dram-drinker—kidneys, &c. pretty healthy.

Thorax. No fluid in pleuræ—universal, but old adhesions of left. Inferior part of either lung, especially left, crepitating very imperfectly, more solid and heavy than natural, but not hepatized. Greater part of the lungs excessively gorged with blood and serum.

Pericardium natural. Heart of enormous size, but, consideratis considerandis, very little loaded with fat. Increase of bulk mainly dependent on hypertrophy of the left ventricle unattended by any corresponding dilatation of cavity. The parietes of the ventricle in some places from an inch and a quarter to an inch and a half in thickness; the septum ventriculorum full an inch and a quarter. No valvular disease. No dilatation of the arch of the aorta. Descending, thoracic, and abdominal aorta presenting a morbid condition of the coats to a considerable extent. Very little bony but principally atheromatous deposites, with fissures and ulcerations of the inner coat. These appearances, as commonly happens, most distinct near the division into the common iliacs.

Cranium. Not examined.

The case has run to some length, and yet we think it is not a line longer than it should be, if any service is to be derived from it. It is interesting and important to the surgeon, as illustrating the impotence of the knife, be it ever so well handled or ever so judiciously employed, in cases where the circulating or respiratory organs are unsound. We are firmly convinced that many a bloody deed is performed especially upon the arteries, when, if the surgeon were better acquainted with the *general* facts of morbid anatomy, and especially if he were versed in the current medical literature and medical knowledge of the day, he would wash his hands, not *after* the operation but *of* it. This is a consummation which must come at last, but cannot come yet; it can only be achieved by the gradual improvement of professional education; it will probably hardly be the boast of the next generation, nor the next generation's sons. The case is likewise interesting to the physician as respects the pathology of that scapegoat for all kinds of organic diseases, asthma. Here we see a patient labouring under asthma, treated for asthma, and found after death to be affected, with what? Enormous hypertrophy of the heart. Could such have been cured, nay, would it not have been aggravated by the ordinary farrago of anti-asthmatics—emetics, æthers, and so forth? Asthma seems to be the favourite Hesperia, the unknown pathologic region of the old school; and like that sweet land of the poetic Greek, it still disappears with the march of knowledge, far, far beyond "the deep ocean" of inquiry. Several other points connected with this case are worthy of attention, amongst which we may particularize the removal of the mass of the protruded omentum. These we leave to the consideration of our readers.

II. INTERESTING CASE OF PNEUMOTHORAX, FOLLOWED BY EMPYEMA AND PERICARDITIS.

The following case is one of much interest, not only in a pathological point of view, but from the aeriform effusion into the chest having been recognized on the first inspection of the patient during life. The valuable chapter on pneumo-thorax in Laennec's work, contains a considerable number of cases of this kind, and the observations of that great man have proved in a satisfactory manner, that the disease is far more common than others which are better understood. The knowledge, however, of this, and indeed of many affections of the chest, is yet so much in its infancy in this country, that any contribution to the store of *authentic* facts must be attended with essential benefit to the profession.

On the 11th of November last, the admission-day at St. George's Hospital, Dr. Chambers, who had been examining a patient in the ward, informed several gentlemen in the waiting room, that he had just discovered a case of pneumo-thorax by percussion, and without the aid of the stethoscope. We immediately proceeded to the patient's bed, and the following are the particulars we there ascertained.

George Canning, about 24 or 25 years of age, a gardener from Richmond, admitted Nov. 11. He complains of pain in the inferior part of the *right* side of the chest, increased but not to a violent degree upon inspiration—cough without much expectoration—imperfect expansibility of right side of chest—decubitus on *left* side, and rather an indisposition to the head being low. Pulse rather quick—skin disposed to moisture, and cheeks suffused with a hectic flush—slight tendency to perspire at nights—tongue white—some thirst—bowels open from medicine.

The lower part of the right side of the chest appears to be bulged out, and nearly the whole of this side sounds remarkably hollow on percussion. On applying the ear no respiratory murmur heard below, and only a feeble one beneath the clavicle—no râle of any kind. The *left* side of the chest offers nothing particular, save that the respiration is so loud in its superior part as to be almost puerile—no unusual sound in this side on percussion.

Patient says that eleven days ago he was first atacked by the pain in the *right* side, for which he did nothing until five days after its commencement. He then applied to a medical man by whom he has been bled three times, blistered once or twice, and leeched and purged with some relief. Has been subject to cough without pain in the side throughout the Summer. The nocturnal perspirations have only been present since the 8th or 9th; he knows no cause for his illness.

From the preternatural sonorousness of the right side of the chest and absence at the same time of the respiratory murmur, we had no hesitation in believing with Dr. Chambers, that the case was one of pneumo-thorax. At the time of our examination there certainly was no *tintement metallique*, but the absence of this did not necessarily imply the absence of the disease of which it is commonly the sign, as all, who are acquainted with the works of Laennec, are aware. In the afternoon of the 11th or morning of the 12th, the patient was again examined by Dr. Hewett with much care, and in addition to the auscultic indications which we have noticed, Dr. H. distinctly heard both the metallic tinkling, and the bourdonnement amphorique or "utricular resonance." Thus, if any faith was to be placed in auscultation, the existence of pneumo-thorax with fluid in the pleura and a communication of that cavity with the bronchia were established. The patient was ordered by Dr. Chambers,

℞. *Hyd. sub. Pulv. ant.* āā. gr. iv. *omni nocte. Haust. sal. c. Tr. digital.* ℥ viij. 6*tis hor. diæta lactea.*

On the 13th a blister was applied to the right side. We learnt on that day from the patient's friends that he had long been sub-

ject to cough, and had suffered several times from severe hæmoptysis, circumstances which, conjoined with the symptoms we have enumerated, seemed to indicate the existence of tubercles and phthisis pulmonalis. The suspicion thus excited was extremely unfortunate in its effects, for by leading all parties to view the case as one of consumption, the pneumo-thorax ceased to attract much attention. For our own parts, to our shame be it spoken, although we saw the patient afterwards on many occasions, we never re-applied the instrument. Dr. Hewett too who examined the patient, as we have mentioned, in the first instance, had no opportunity of repeating his exploration, being informed that the case had been dismissed. The subsequent notes of the case are chiefly extracted from the clinical book of Dr. Chambers.

On the 16th the digitalis was omitted, and on the 18th, compound squill pill at night, with infusion of roses and sulphate of magnesia thrice daily, were substituted for the former medicines. On the 25th, half a drachm of the spir. æth. sulph. comp. was added to each draught, and on the 4th Dec. a change in the symptoms was observed. The patient "expanded both sides of the chest nearly equally," but *could not* lie on the *left* side, which was now become the seat of pain. The pulse was very small and frequent, skin cool and not heated at night, tongue whitish, bowels open, urine free, appetite indifferent.

Emp. Canth. lat. sinist.—Pergat.

5th. Acute pain in left side increased on coughing or inspiration — pulse quick and sharp — skin hot — face flushed — fever — *orthopnœa*—distress. These symptoms were considered to indicate one of those attacks of pleurisy so common during the progress of phthisis. We shall see by and bye that they probably denoted something more.

V. S. ad ℥xij. *H. Sal. c. Vin. Ant. Tart.* 3ss. *Tr. Digital.* ℥x. *4tis horis. Omr. alia.*

The blood abstracted was buffed and cupped, the pain in the side relieved but not removed, and on the 7th Dr. C. found the upper part of the left thorax resonant, the lower not so. Six minims of laudanum were added to each saline draught, and the *pleurisy* appearing still to hang about him, he was ordered on the 10th to take two grains of calomel every night. The breathing now grew very hurried, the patient was generally observed to be sitting up, and emaciation was rapidly increasing. On the 14th the digitalis was omitted, and on the 25th, the patient complained of pain along the margin of the right false ribs, stretching thence to the hypochondrium; he continued to lie on the *right* side—the pulse was 96—the skin cool. On the 23d a blister was applied to the right side, and on the 30th another was placed upon the sternum. On the 4th of January there was a revival of the pain in the left side, and this was once more attacked by a blister. On the 8th, the bowels being much purged, the calomel pill was omitted, and next day the cough being very troublesome, he was ordered to take only spermaceti draught with squills and laudanum. The diarrhœa grew more distressing and was met with chalk mixture, &c. emaciation and debility made rapid progress, and on the 19th of the present month, January, the poor fellow died. We may observe that the most prominent symptoms latterly were the attacks of pain in the chest, the cough, and the emaciation. The expectoration was never very abundant, and at the worst only *suspicious* in its character. For the fortnight or three weeks preceding his death, the patient was generally observed sitting up in bed, and in that position he actually died. These facts are deserving of attention because they do not square with the symptoms of phthisis in its latter stages.

Sectio Cadaveris, 20th, 2 p. m. — Body much emaciated — on percussing right side of chest, a hollow, and, as some thought, metallic sound superiorly.

THORAX.—Very considerable quantity of turbid puriform fluid in right side of chest—pleuræ themselves thickened and lined by a dense exudation, half lymph half pus — pleura pulmonalis remarkably corrugated

and puckered. *Some air in the cavity of the pleura which escaped on opening it.*

Lung remarkably compressed and condensed, *fleshy* when felt, and not crepitating at all. Its length about 6 inches, its breadth about 3, its depth from before backwards not above 2 1-2 at the broadest part. The lobes all matted together, and the lung itself thrust to the back and central part of the pleural cavity by the pressure of the air and fluid.

At the inferior and posterior part of the upper lobe of the lung an opening through the pleura pulmonalis, about the size of a pea, with rounded and fistulous edges. Air blown into the trachea with bellows issued through it.

On laying open the bronchus, the great branch passing to the upper lobe was clearly traced by Dr. Wilson to communicate with the fistulous opening into the pleura. The channel of communication was sufficiently wide to admit the feathered end of a common writing pen, which is left in situ in the preparation.

Pericardium and its contents pushed preternaturally to the left by the effusion into the right side of the chest. A considerable quantity of somewhat bloody effusion into the cavity of the pericardium, and organized lymph deposited on both its surfaces. Heart little, if at all, enlarged in any sense —valves and great vessels healthy.

Pleura on left side generally adherent by rather recent lymph—no fluid.

Throughout the left lung, which was large, several groups of transparent miliary tubercles, unaccompanied by consolidation of the contiguous parenchyma. At the apex of the lung these tubercles were more numerous; several of them larger than pins' heads, yellow, and opaque, in short beginning to maturate; none of them softened; not a vomica to be found. Many of the tubercles situated immediately beneath the pleura pulmonalis.

On the whole the tubercles might be said to be few in number, in their earliest stage, and not materially interfering with the function of respiration.

ABDOMEN:—Liver lower and more to the left than natural, from the effusion in the right side of the chest; nothing further of any consequence observed.

CRANIUM:—Not examined.

The present case, when taken in connexion with that of Mr. Cornish, published by the Editor of this Journal, is worthy of consideration, and attentive consideration too, on the part of the profession. Happening in this town within a few months of each other, they shew the not unfrequent occurrence of a disease, the very name of which is a puzzle, its existence a problem, to many of the practitioners in London. The reason is clear;—that without auscultation or percussion, it CANNOT be recognized during life, it probably will not be discovered after death. In Dr. Johnson's case, as our readers well know, the operation of paracentesis thoracis was performed. What would have been its effect in the present instance? This can only be conjectured from taking a review of the progress of the case. A patient of scrofulous aspect labours long under cough and occasionally has hæmoptysis; all at once symptoms of acute pleurisy in the right side of the chest supervene; and in eleven days from the commencement of this attack, being examined by the stethoscope, he is found to labour under the symptoms of pneumo-thorax, liquid in the pleural cavity, and a communication with the bronchi. Is it not rational to conclude that this patient had tubercles in the right lung; that one of these tubercles, probably situated immediately beneath the pleura, gave way; that the atmospheric air escaped from the bronchi into the pleural cavity through this opening, and that, being there, it gave rise to pleurisy and its consequence, effusion. It is not only rational to conclude that such was the case, but it seems to us impossible to do otherwise.

Now, having brought the patient to this point, let us carry him to the close of his career. After awhile he is attacked by pain and the symptoms of inflammation, first in the left side, then again in the right, then beneath the sternum, and, finally, in the left side once more; he emaciates rapidly; spits comparatively little, and dies. On dissection, in addition to the empyema and pneumo-

thorax on the right side, there are found the evidences of chronic pericarditis, pleural adhesions on the left side, and a few crude tubercles in the left lung. Is it not evident that the inflammation of the pericardium and left side was merely the propagation and extension of the matrix, as it were, that existed on the right, the nidus and focus of mischief? Is it not evident that the patient did not die of phthisis, strictly speaking, at all; but of the empyema and pneumo-thorax in the right side, and their consequences elsewhere? The proposition would seem to be incontrovertible. The question then comes to be, would the operation of paracentesis thoracis have relieved him? As far as the actual causes of his death were concerned, it undoubtedly would have done so. There are two things, however, to be taken into the account in the investigation of this interesting and important point. In the first place, the patient might die of the immediate effects of the operation, a circumstance which, in logic as well as in common sense, would interfere with the success of the measure. This objection, however, is equally applicable to the operation for empyema simply and yet it is allowed to be, cæteris paribus, proper in that disease. In the next place the pneumo-thorax, which gave rise to all the rest, was itself, if our reasoning be correct, the consequence of tubercles more or less advanced. Now tubercles in the lungs, or phthisis pulmonalis, we know to be a very fatal, if not an incurable disease; ergo, it follows as a fair deduction, that even if our operation be successful and cure the pneumo-thorax, it still leaves behind it an incurable or nearly incurable malady, viz. tubercular phthisis.*

The operation, then, not holding out a very cheering prospect in this kind of pneumo-thorax, we are led to inquire whether it bid more fairly in any other form of this affection. We believe that it does so in that variety not complicated with an aperture into the lung. Into this field we may not enter, but refer our readers, as we have done before, to the admirable work of Laennec.

XIII.

MASSACHUSETTS' GENERAL HOSPITAL.

I. REMOVAL OF HALF THE LOWER JAW BONE, FOR OSTEO-SARCOMA. By DR. WARREN.

The following case is taken from the 6th No. of the Boston Medical and Surgical Journal.

JAMES COOK, blockmaker, aged 17. Sixteen months since received a violent blow on the left side of the lower jaw. In four months after, he perceived an enlargement of the bone on that side, which for ten months was slow, but for the last month has been rapid. The tumour now produces a most unsightly projection of the face on the left side. At first view it appears to be seated on the front of the bone, but on examination is ascertained to extend inward to the mouth as well as outward. The whole of the left side of the jaw is found to be in an enlarged state from the chin to the ear; and the projection in front of the bone is of the size of a large egg. The Consulting Physicians of the hospital having examined the patient, agreed that nothing could save the patient's life but an operation. This was accordingly performed by Dr. WARREN on the following day.

Operation. February, 1825.—An incision was begun close to the fore part of the ear

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* If, however, the pneumo-thorax in itself be the cause of extreme distress, and probably of rapid death, as in Dr. Johnson's case, we conceive that all such arguments as these must merge in the indication of giving present relief and disregarding possible consequences. No man of science and courage would stand tamely by, and see his patient die like a dog before his face without an effort to save him. Logic here must yield to something higher than logic—humanity and moral daring.

and carried downward to the angle of the jaw, thence forward, in a semicircular form to the chin, pursuing the line of the lower edge of the jaw. The skin and muscles were dissected upwards so as to uncover the jaw and the tumour. The dissection was then carried under and within the jaw, to separate it from the mouth. Next, the two front teeth of the left side were removed. Then the bone was sawn through at the chin by Hey's saw; in doing which, it was necessary to have the bone supported by an assistant, on account of its unsteadiness under the saw. In this way the bone being divided, the anterior part of it was drawn forwards and the knife carried on its inside, to complete the division of the flesh within, up to the joint. The bone being found to be enlarged quite into the socket, it was necessary to disarticulate it. In order to accomplish this the attachment of the temporal muscle to the coronoid process was cut off, and with less difficulty than was expected. After this, the ligaments of the joint being cut, the bone was removed from its socket.

The facial artery was divided; and the internal maxillary artery, being in contact with the tumour, was necessarily cut off. Both bled furiously, but were readily stopped by compressing the carotid artery firmly, while they were secured by ligature. The patient did not lose much blood; nor did he complain very much of the operation.

The skin was brought together and secured by plasters; and the large excavation, formed by taking out the bone, was filled by sponges on the outside of the dressings and well secured by bandage.

On the evening of the operation, the patient, after appearing well, was excessively faint; not from loss of blood but from constitutional sympathy; and great fears were felt for his life. By the use of cordials and external warmth he revived, and had no further bad symptoms afterwards. Great part of the wound was found united on the first dressing, and the rest healed well, so that in a month he was well enough to quit the hospital.

Notwithstanding the loss of half the lower jaw, he was able to bite and chew very comfortably. Before he left the hospital, some one asking him if he could use his jaw, he answered, "Give me a cracker (biscuit) and I will show you."

Remarks. Considering the importance of the parts involved in this operation, it is remarkable that it should be accomplished with so much ease, and so little ill consequence. The affection of the constitution at a period a few hours subsequent to the operation was indeed great, but soon passed off. Young persons suffer more by constitutional sympathy from operations, than old ones; that is, they are in more danger of being depressed and dying than old people, under the same loss of blood. Infants operated on for hare-lip, sometimes die from this cause, to the great astonishment of the surgeon. Children subjected to amputation and other considerable operations, now and then sink where there has been very little effusion of blood. Such occurrences should lead us to watch these young patients with more than ordinary attention. As an exemplification of the difference of impression made by operations on patients of different ages, compare the effect of this operation on a healthy muscular young man, with that related in the second number of this journal on a person of feeble constitution and advanced period of life.

II. EXCISION OF NERVES IN CASES OF NEURALGIA. By J. C. WARREN, M. D.

From a number of cases of this dreadful disease, reported from the above hospital in the Boston Medical and Surgical Journal, we select the three following as the most interesting. Their authenticity is unquestionable.

CASE 1.—*Excision of the Submaxillary Nerve.*

Mr. S. aged 70, applied to me, stating that he had a dreadfully painful complaint in the face, and that he wished an operation for its relief. It appeared that he had been first affected without any obvious

cause about fourteen years before. His pains were of two kinds; first, a constant aching pain, which he compared to the worst toothache; second, a spasmodic affection which occurred many times during the day. When he had the latter kind of attack, the muscles of the face quivered, the face became red and swelled, the eyes were filled with tears, and his intellect was for the moment suspended. For the last four years he had not been free from pain while awake, and his sleep was short and interrupted.

Respectable practitioners in the part of the country where he lived, had performed three operations, two on the sub-orbitar nerve and its branches, the third on the nerve of the lower jaw, where it comes out on the chin. These operations gave him a degree of relief, but the pain continued with a severity intolerable, and life had become a burden to him.

The pain he described as beginning near the ear, and thence darting into the lower and upper jaw, the lips, eye, forehead and scalp. The patient had made himself acquainted with the situation of the nerves of the face, and believed his pain to reside in the facial nerve, which he wished to have divided.

He was informed that an operation such as he wished might be executed; but that in his case the affection appeared so general that there was no prospect of a cure; and that, in fact, there were not any cases on record, of a successful division of the facial nerve at its root for this disorder.* As soon as the patient understood that the operation was practicable he desired to have it performed, and agreed to enter the Hospital, on account of the superior advantages it afforded over any private situation.

The operation was thus conducted. An incision two inches long was carried from the back of the ear downwards in front of the mastoid process. The edge of the parotid gland was then exposed on one side, and on the other, the anterior edge of the mastoid muscle. The dissection being continued between the parotid gland and the mastoid process, the facial nerve was exposed where it crosses this space and passes on the gland, it was divided and a portion cut out. When the nerve was cut, the muscles of the face quivered and were paralyzed; but the patient said he merely perceived the division; that it was not attended with an acute pain, and that the principal cause of his sufferings was not reached.

After this operation, it appeared that the pain in the upper part of the face was diminished; perhaps removed. But the patient now became sensible that the most acute pain, and that which probably had existed first, was seated deeply in the lower jaw, beginning at the zygomatic arch and shooting into the bone. It was entirely independent of the wound made in the operation. From this wound he experienced no inconvenience, was unwilling to speak of it, and scarcely wished it dressed, so greatly was he disappointed at not being relieved from his sufferings. He begged his case might be again taken into consideration, and something more if possible devised for his relief. A meeting of the consulting physicians and surgeons being called, I proposed the operation which is described hereafter, and it being agreed to, was performed nine days after the first.

An incision was made over the side of the jaw, from the semilunar notch to the inferior edge of the bone. The parotid gland being exposed, was divided as far back as possible, and turned forwards. Then the masse-

* The branches of the facial nerve have been repeatedly cut in front of the parotid gland; but we are not aware that the nerve has been divided at its root. At least Mr. Swan, in his prize book, lately published, informs us that "to attempt to divide the trunk of this nerve will not only be very difficult, but it will likewise be very dangerous." It is presumed he would have stated any instance of its division which he might have known. The second operation mentioned in this article is, we suppose, entitled to the merit of novelty.—ED.

ter muscle was divided in the course of its fibres to the bone, and afterwards the edge of the knife being turned forwards, some of the fibres were transversely cut, in order to make room over the bone. A trephine, three quarters of an inch in diameter, was then applied half an inch below the semilunar notch, midway between the anterior and posterior edges of the jaw; and the circular piece sawed through and removed in two parts, the external table by a lever, the internal by forceps. Between these pieces lay the nerve, with its accompanying artery and vein, at the point where they penetrate the bone. At the superior edge of the hole in the bone was seen the large internal maxillary vein, pulsating from the movements of the artery. The sub-maxillary nerve being now raised on a probe, the patient directly exclaimed that this was the seat of his sufferings. Half an inch of this nerve was cut out, and on examination, it was found to comprehend the branch given to the internal face of the lower jaw. The artery was tied without difficulty. The transverse artery of the face had been previously tied on each side of the wound. A suture was employed to bring together the two parts of the parotid gland, and the wound closed by adhesive plaster.

The patient said that the pain of this operation could not be compared with that from his disorder. The pain on the wounding and dividing the maxillary nerve was most acute.

On the evening of the operation he was relieved from pain, the first time for four years; and had no return of it afterward. On passing a probe into the wound three or four days after, a branch of nerve in the masseter was touched, and a violent pain produced. The pain did not, however, return, nor had he any threatening of his former attacks. On the nineteenth day from the second operation, his wounds being nearly healed, he left the Hospital perfectly cured of his disease, with the strongest conviction that it would not recur, and not a little gratified by his own perseverance.

CASE 2.—*Excision of the Infra-Orbitar Nerve.*

Encouraged by the result of the last case, I operated in the same manner in the following cases.

Mary Tucker, aged fifty-one, admitted into the Massachusetts General Hospital 24th April, 1824.

Has a pain in the left side of the face, situated in the infra-orbitary foramen, but often extending to the jaws and occasioning a sense of tightness and burning in these parts. She describes the pain as acute and lancinating, and as always aggravated by exposure to cold and by fatigue. During the paroxysms her vision is much impaired, and when they are severe, the face swells very much. There are moments when she is free from complaint, but talking or exertion is apt to bring it on again. The disease is most troublesome at night, and prevents sleep. Says she has not slept all night for a number of years.

She has had this disease for eighteen years. For six months past has had almost constant pain. She says she has had the cow-pock, was very ill, and in her recovery had pain and stiffness in the left side of her face, with an inclination of the face to the left side. This lasted three months; during the warm weather she was free from this affection, but, in cold weather, it recurred, and has gradually assumed its present form. She had rather a feeble constitution originally, but enjoyed tolerable health previous to the present disease. Has occasionally used anodynes with advantage at night. Has always been rather costive.

℞. Solut. Sulph. Magnes. ℥iij.

29th. — *Operation.* The head was inclined to the right shoulder, resting upon the breast of an assistant. An incision was then made directly over the nerve, from the orbit, downwards about an inch. The seat of the nerve was made certain by passing a probe into the wound. Then the nerve being fully exposed, was divided near the infra-orbitar foramen; a piece half an inch long was dissected out and removed with its incipent ramifications. After the operation, a few small vessels bled considerably, which

were restrained by sponges and cold water. The patient was then returned to her bed.

30th. At two o'clock, yesterday, the sponge was removed, and the vessels bled as copiously as before. A layer of lint was placed in the wound. The patient complained of some soreness and pain last evening, and was directed to take thirty drops of laudanum. This morning is tolerably comfortable; says she passed a quiet night. Now the situation of the pain has altered; since the operation, it is more confined to the parts about the lower jaw. Bowels well. Face a little swollen. From this time the pain gradually diminished, and in June she left the Hospital, entirely cured.

CASE. 3.—*Margaret Andrews, widow, aged* 57. *Entered the Mass. Gen. Hospital, March* 16, 1827.

Six years ago had a carious tooth in upper jaw, on left side: at the same time began to have darting or jumping pain on left side, commencing at this tooth and passing up the cheek. Had the tooth extracted with some relief. Paroxysms of pain have gradually increased in violence and duration—are worst, as she thinks, in August and September. They now commence as at first. The pain passes to the cheek-bone where it is most severe: it then starts in two courses, one passing the external, the other the internal angle of the left eye, and is again felt at a spot on the forehead. The pains sometimes extend to the back of the head. When the pain is most severe, she cannot bear the slightest touch upon the cheek. Severe paroxysms produce nausea; they are brought on by taking hot or cold substances, or by exposure to cold air. Her appetite is tolerably good; tongue clean,—is unable to extend it equally on both sides. Bowels prone to costiveness. Ceased menstruating at forty-eight or forty-nine; does not know which. Has used pills of extract of stramonium and ipecac. with some relief.

March 17. *Take of the extract of stramonium sixty grains, and make into twelve pills.* Let her take them every four hours, beginning with one pill and adding one to each dose. Also when the pain is urgent at night let her take two grains of the extract of stramonium.

March 20. Now takes six pills three times a day. 25. Pains diminished. Is very dizzy for an hour after each dose of pills. 26. Pains were severe; dizziness less. 30. *Take of the carbonate of iron, sixty grains three times a day.* April 5. Dose of the carbonate increased to eighty grains three times a day. 11. Pains on the whole undiminished during nearly a month, while she has been in the hospital. Referred to the care of the surgeon.

A blister two inches square was applied to the cheek and dressed daily with a plaster consisting of extract of belladonna 3iij., resinous plaster, half an ounce. 16. *Take of extract of belladonna, one grain three times a day.* This quantity produced nausea and dizziness; but was continued to the 22d, when her pains were as severe as ever. Omit all the remedies and let her take two ounces of the purgative solution, as preparatory to an operation, after two days of rest from medicine.

April 24. *The operation was thus performed.*

An incision one inch and a half long was made from a point half an inch below the middle of the orbit towards the middle of the left half of the upper lip; the periosteum was exposed to view with the sub-orbitar nerve lying thereon and beginning to divide. The nerve, as it arises from the sub-orbitar foramen, was cut across, then the inferior part being raised and dissected up, for half an inch, was cut off. The patient expressed some pain on the touching and division of the nerve, and at the same time a satisfaction at feeling that the source of her suffering was reached.

After the operation the tics never appeared; but she had some pain, which rapidly diminished till the 14th of the following month, when she was discharged: and I had the satisfaction to hear from her some months after, that she had no pain subsequently to her quitting the hospital.

XIV.

EDINBURGH SURGICAL HOSPITAL.*

TREATMENT OF ULCERS.

Mr. Syme continues to follow up his very laudable plan of reporting the more interesting cases that occur to him at his surgical hospital. None can appreciate more highly than we do, the advantages of surgeons to public institutions thus laying open to their brethren the stores of professional information which their practice affords them; and none have awarded the meed of honest approbation more earnestly or more constantly than we have done. But we cannot conceal from ourselves, and will not conceal from our readers, that reports from what we may term *private* hospitals offer a temptation to puffery and even quackery; and more than that, the records of medicine prove but too surely and sadly, that what is coarsely called humbug, of the worst description, has been practised within their walls and promulgated without them. We make these remarks to put Mr. Syme upon his guard, to warn him from falling into an error to which the weak parts of human nature might possibly incline him, to render him in fact respectable and respected, useful to the profession, and in the long run to himself. We take this opportunity of stating that nothing of so degrading a stamp has characterised or characterises Mr. Syme's reports, but we cannot avoid remarking a leaning on his part towards his own institution, which though perfectly excusable, must yet be deemed a weakness. We remarked in our review of his last, that when a little older as a hospital surgeon, he would become a little more distrustful of hospital cases and hospital cures. We may now observe that he should not lean so fondly as he seems to do on the gratitude and so forth of the class of persons with whom he will have to do. Unless human nature is vastly different in the modern Athens and the modern Babylon, the thanks of hospital patients are too often but a sorry farce. It appears that Mr. Syme is a very successful chirurgeon in the treatment of sore legs, and what is equally gratifying, his pupils would seem to have caught no small portion of that "divine ichor," which, like the blood from the wounded Deity in the Iliad, distils from their worthy preceptor's clinical instructions.

"The very great number and variety of ulcers which have been presented at the hospital, afforded me ample opportunity of illustrating the treatment of these most frequent and distressing affections. I felt much satisfaction in doing so on several accounts. 1*st*. The great relief derived by the patients, many of whom were restored to the means of earning a livelihood, of which they had previously been long deprived. 2*d*. The useful instruction derived by my pupils, who were wise enough to regard the ordinary duties of their profession as deserving of at least as much attention as those great and bloody exploits, which occur but seldom in the course of practice. 3*d*. The widely extended and sound reputation acquired by the new Institution from curing diseases, where the relief is so great and manifest, and the means of remedy are so little disagreeable."

The *sound* reputation of the institution for *bad* legs is no doubt a very flattering thing. Let us see the secret, which like all very valuable things, is contained in a mighty small compass:

"It would be out of place for me to enter here into a detail of cases which are usually reputed trifling and uninteresting, though there are few surgical diseases which more seriously affect the patient's comfort; but I cannot refrain from reporting at some length, and with some care, the advantages of a practice which I have lately introduced in their treatment and which I believe is a new one.

In treating what are called Indolent ulcers of the leg, I used to regard the plan recommended by Mr. Baynton as approaching nearly to perfection, and still believe that, when properly executed, it will sooner or later effect a cure, if a cure be practicable;

* Ed. Med. and Surg. Journ. No. 102.

but another method has lately suggested itself to me, which seems in many respects preferable.

It is not unusual to meet with cases of indolent ulcers which, after exhibiting their characteristic obstinacy in opposition to the most careful treatment, heal up at once without any attention, so soon as the limb begins to recover from an attack of phlegmonous erysipelas which it has happened to suffer. The observation of such cases led me to try the effect of inducing a similar inflammation artificially, and the result has fully equalled my expectations. The means employed for this purpose were blisters, and the object being to excite a smart and diffuse inflammation, they were not limited in extent to the size of the sore, but were made to cover a great part of the limb, and were allowed to remain in operation for a long while, sometimes even twenty-four hours.

The first effect of the blisters in these cases *is a more than ordinary inflammation and discharge*, the surface sometimes continuing to suppurate profusely for several days, just as if the cutis had been denuded by a scald or burn.

In a day or two the patient is agreeably surprised by observing that the œdematous swelling of the limb, which so constantly accompanies ulcers of the kind under consideration, begins to subside, and in the course of a very short time, rarely exceeding a week or two, it nearly or entirely disappears. The consequence of this detumescence is a great diminution in the size of the sore, which also comes to be on a level with the surrounding skin. Then the surface takes on a healthy granulating appearance, and the sore heals, partly by contraction, partly by the formation of a cicatrix. For the first few days after the blister has been applied, some simple ointment may be used, just as in the ordinary treatment of a blistered surface, and afterwards a wash of acetate of lead or sulphate of zinc, in the proportion of one or two grains to the ounce. If the sore should again prove obstinate, the blister may be repeated, and if a small part remains stationary towards the conclusion of the cure, it ought to be filled with the red oxide of mercury, or a mixture of this powder with flour. My friend, Professor Davidson of Aberdeen, induced me to try this application in the treatment of ulcers, and I cannot say too much in its praise, especially in the case just mentioned. After one or two dressings it forms a firm crust over the sore, which ought not to be disturbed, and renders any farther interference unnecessary.

I have no hesitation in ascribing the good effect of blisters which have been just described to their stimulating the absorbent vessels, so as to remove the œdema. We know that blisters possess a singular power of doing this, as is exemplified in the cure of dropsies of the joints and burse, and it is easy to see that the existence of œdema must be an insuperable obstacle to the healing of the ulcer. It prevents the contractile effect of the granulating action, and thus occasions a struggle, which probably gives rise to the pain and other symptoms that so often induce a resemblance between indolent and irritable ulcers. And we find, in fact, that all the modes of treating the ulcers in question which have ever proved serviceable, such as the horizontal posture, the roller of Underwood and Whately, or the adhesive straps of Baynton, tend to reduce œdematous swelling. Some frivolous and wrong-headed improvers have advised that the straps should not encircle the whole limb, but only two-thirds of it, and in so far have done what they could to bring themselves and the practice into contempt. I lately cured an ulcer on the leg of a lady which had existed without interruption for twenty years, and was deemed incurable, because it had resisted the most assiduous exertions of several surgeons in town. When I proposed to apply adhesive plasters, the patient would hardly consent, because they had been tried previously without success. I ascertained that they had not encircled the limb, and hence the failure."

As Mr. Syme has been so obliging as to communicate this "secret worth knowing" to *us*, we will hint another equally valuable to *him*: viz. that he will find old ulcers on

the legs just as troublesome in 1839 as he did in 1829, before he employed the blistering practice, or leased the surgical hospital. Whenever there are a thousand specifics for a disease, the man of the world may be certain there are none. There is only one remedy for the itch, because any one may cure it with brimstone; there are at least a hundred for tetanus, because no man can cure it at all! Mr. Stafford published an octavo volume the other day to assure the public that melted wax was almost infallible for the cure of ulcers. The sanguine were in extacies; "Ευρηκα" was the general cry; but we doubted. Surely we were right, for here comes Mr. Syme "in a month, a little month," with as dismal a tone as ever on the obstinacy of ulcers, save under *his* new method. Each inventor of a system or a remedy is like Janus; one face, a very long one, looks back on all former systems and remedies, the other, bedecked with wreathed smiles, regards the inventor's sunny Utopia. For ourselves, cold, cautious and calculating, we look before we leap, wait before we pronounce, hesitate before we believe.—Probably before our next number sees the light, another certain cure for ulcers will have been discovered to be necessary, and necessarily discovered.

XV.

HOPITAL DE LA CHARITE.

CIRCUMSCRIBED ANEURISM AFTER VENESECTION.—CURE FROM THE HUNTERIAN OPERATION.

It is strange to see what a superstitious kind of horror is attached by many medical men to the puncture of the brachial artery in the operation of venesection. When the accident has taken place the parties appear generally to lose their wits, and fly to all kinds of injudicious measures. We remember witnessing a case of this kind, in which a tourniquet had been thrust upon the limb and allowed to remain for one or two days, with the effect of producing the most excessive and injurious tumefaction. There are instances enough upon record to prove that moderate and *properly applied* pressure will frequently effect a cure of the puncture, and even if it fails it may perhaps reduce the case to one of false aeurism, to be treated like false aneurism elsewhere by the Hunterian operation.

*Case.** — Virginia Dooux, twenty-three years of age, was bled in August 1829, for some nervous symptoms under which she laboured. At the instant of the operation she felt a kind of tremor running to her fingers and the nature of the jet discovered that the artery was wounded. The practitioner allowed a certain quantity of blood to escape, and bandaged the limb very firmly, but without entirely arresting the hæmorrhage. The limb swelled greatly and the bandage was removed next morning, when although the puncture was not closed, no bleeding took place. The swelling of the arm remained for five days with pain and inflammation round the wound, a sensation of a constant beating was experienced at the bend of the elbow, but in the course of a week the limb admitted of extension. In the course of another week a small pulsating tumour, in size resembling a filbert, made its appearance, increased with rapidity, was treated unsuccessfully by the application of ice, and was so far advanced at the end of five weeks that the patient entered the hospital of La Charité.

At this time, Sept. 7, the tumour was rounded, about an inch in length, situated immediately above the fold of the arm on the inside of the tendon of the biceps. The skin covering it was not changed in colour, it pulsated visibly in synchrony with the pulse at the wrist, and not only in the tumour but also throughout the artery a peculiar whizzing sensation was communicated to the finger. On applying the stethoscope in the same situations, a distinct *bruissement* was

* Journ. Hebdomad. No. 59.

perceptible. On compressing the brachial artery about the middle of the arm the size of the tumour was greatly diminished; no varicose vein existed at the bend of the arm, but several large veins ramified beneath the skin on the outside of the tumour; the hand and fore-arm were free from swelling, the motions not materially impaired. The patient had been married about a year, was troubled with mænnorrhagia, and suffered from those various nervous pains so frequently attendant on disordered menstruation.

At first it was suspected that the case might be one of varicose aneurism, but the examination and the facts above elicited proved, beyond a doubt, that it was one of consecutive false aneurism.* On the 12th of Sept. M. Roux performed the operation of tying the artery above the tumour, in accordance with the principle adopted in the treatment of false aneurism elsewhere. The patient being laid upon a bed with the right arm conveniently placed, the course of the brachial artery was ascertained by the finger, and an incision fifteen lines in length was made towards the middle of the arm, and on the inner side of the biceps muscle. A vein which was divided in this incision, bled smartly. The fascia and cellular sheath of the brachial artery and median nerve having been divided, a groovgd director, slightly curved at its termination, was introduced from within outwards beneath what appeared to be the artery, and a probe armed with a double thread was passed along the groove. The probe was withdrawn and the ends of the threads raised, but without the effect of arresting the pulsations of the tumour. On the contrary the patient experienced only intense suffering, and it was evident enough that the nerve and not the artery was engaged. The latter was discovered deeper, though raised by the director; the threads were withdrawn from the nerve and passed by means of the probe around the artery; their ends were then raised with the effect of commanding the circulation in the tumour; all was now right, and accordingly the ligatures were tied according to Scarpa's method, on a cylinder of *sparadrap* applied upon the vessel. The tumour immediately diminished in size, the pulse ceased in the radial artery, and the wound was dressed to the bottom with lint and covered with compresses and roller. The limb was enveloped in warm rags, and placed on a cushion in the semiflexed position.

A little heat of skin and numbness of the fingers took place during the day, and a bad night with fever ensued. The hand was warm and retained so by means of heated cloths, in addition to which an anodyne draught and a lavement were prescribed. Next day the patient was much better, but there was still some numbness in the fingers and particularly in the thumb, and at the patient's request a smaller bandage and compress were applied. The tongue was loaded, the belly slightly tender on pressure, and the bowels not opened, but otherwise the general health was good. A lavement and anodyne were again exhibited, but without effect *quoad* the bowels, in consequence of which calomel was exhibited on the 15th and castor oil in lavement on the 16, when copious evacuations and complete relief were the consequence. Suppuration of the wound took place, pulsation began to return in the radial artery on the 17th, the ligatures came away on the 26th, and the patient left the hospital cured in the early part of October. The tumour was at this time quite solid, and reduced to the size of a very small pea; the motions of the fore-arm on the arm were still difficult, especially those of extension; and a slight degree of numbness was occasionally felt in the fingers. She was recommended on her departure to use local

* By consecutive false aneurism is meant an aneurismal sac formed from the cellular membrane, and communicating with the interior of the artery by means of the wound in the latter. We recommend such of our readers as are not perfectly acquainted with the modern nomenclatura of aneurismal affections, to study the admirable work of Mr. Hodgson on the Diseases of the Arteries. It is a work which ought to be in the hands of every one.—ED.

baths of gelatine, and *douches* directed on the arm.

This is a good specimen of the success that occasionally attends the operation of tying the artery above the tumour in the circumscribed aneurism after wound of the vessel in bleeding. In the diffused aneurism, that in which the blood is extensively effused into the cellular membrane, and an operation is not to be recommended, but the surgeon must cut down and tie the vessel above and below the puncture, as in any other case of wounded artery. Even in circumscribed aneurism like the present, when a sac is formed from the cellular membrane, the Hunterian operation will occasionally fail in consequence of the free ingress of blood from below, and it then becomes necessary to tie *all* the branches entering the sac, in fact to have recourse to the old operation for aneurism. A very interesting case of this kind was published by Mr. Brodie a few years ago, and noticed in this Journal. If before proceeding to the operation it is found that pressure on the brachial artery above the tumour exercises a decided and uncontrolled influence on its pulsation and size, the probability is that one ligature in that situation will answer. If it does not arrest the pulsation, or doing that has no effect on the bulk of the tumour, the probability is then just the other way, and the surgeon must lay his account to the Hunterian operation failing of success. The subject is one of such extreme interest that we feel great reluctance in waiving the consideration of many other questions connected with it.

XVI.

ALMS HOUSE INFIRMARY OF PHILADELPHIA.

CASES OF OBSCURE PERITONITIS.*

Dr. Hugh L. Hodge, one of the physicians to the above Instituion, has written a short but sensible paper on those obscurely marked cases of peritonitis occasionally met with in practice, which lead even the ablest into error. In order to put practitioners as much as possible upon their guard we shall give the main features of the two cases which form the nucleus of his observations.

"*Case* 1. A mulatto man, about thirty years of age, of a delicate constitution. He attributed his illness to exposure to wet and cold; and some days after the commencement of his complaint was brought to the infirmary. He then complained of the usual symptoms of dysentery. His abdomen being however enlarged [tympanitic] and painful, especially on pressure, the patient was treated by means of cathartics, anodynes, and demulcents; the symptoms greatly ameliorated, and he appeared convalescent. In this situation, contrary to advice, he left the infirmary and returned to his usual mode of living. He however was, in a few days, re-admited into the institution, and again treated as suffering from dysentery. He complained of severe griping pains irritation of the rectum, tenesmus, with frequent inclination to stool. The discharges per rectum were however peculiar; presenting the appearance of yeast in colour and consistence, as if a large quantity of sero-mucous fluid had been evacuated without any admixture of bile or fæces. The abdomen was tympanitic, and pain was excited by pressure. By the use of alteratives (calomel, ipecacuanha, and opium in combination,) and laxatives, assisted by cold affusions to the abdomen and blisters to the lower extremities, the symptoms of mucous irritation were again subdued. The stools

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* American Journ. April, 1829.

became bilious and feculent, and there seemed to be no reason why the patient should not recover. He remained however weak and miserable, was much emaciated, without appetite, had a slight paroxysm of fever in the afternoon; the abdomen was tympanitic, but not painful, except when much pressure was made. In this state he continued with little apparent alteration for several days; his strength however gradually diminished, and he died.

"*On dissection* there were evidently some vestiges of mucous inflammation; but bilious fæces were found in the intestines, and there was nothing in this tissue sufficient to account for the death of the patient. The peritoneal surface however was universally inflamed; lymphatic depositions connected all the viscera of the abdomen; while pure pus was found in circumscribed cavities among the convolutions of the intestines, and the folds of the mesentery. In the latter situation a large abscess was formed. Several portions of the peritoneum were of a dark or livid colour and easily torn, as if in a gangrenous condition."

This a well marked and instructive case of peritonitis supervening, in all probability, on pure dysentery. The progress of the symptoms, and the appearances post mortem seem to prove that such was the order of occurrences, for we do not imagine that on the patient's first admission into the infirmary, peritoneal inflammation existed, at least to any extent. Practitioners should bear in mind the tendency of long-continued, or mismanaged dysentery to give rise to inflammation of the serous membrane, a tendency which we have frequently observed in practice.

Case 2. Edward Graham, æt. 30, an Irish labourer of intemperate habits, admitted on the 19th June, 1828, with mania à potu threatening. He was ordered a dose of cal-olmel and jalap which purged him freely, and he appeared convalescent, when he was seized in the evening of the 21st, with sharp pains and swelling in the abdomen, and a frequent desire to go to stool without being able to evacuate any thing. The case being thought to be colic, cal. gr. x., pulv. op. gr. i. were prescribed, and the patient felt better on the 22nd, but the abdomen was still tender and swollen, pulse frequent, full and soft, tongue foul, bowels not opened. *Cups to abdomen—cal.* gr. ij. *pulv op.* grss. *q. h. h. —enema.* 23d, No better, skin hot; pulse frequent with slight tension; tongue florid at edges, brownish and dry in centre; abdomen swollen and tender: *Cal.* ℈i. *to be followed by oil till bowels act freely. Hirud.* 60 *abdom. fotus.* At 3 P. M. the pain was worse and he was bled to ℥viij, blood cupped and buffy. The bowels were well opened in the evening with much relief; 60 *leeches—senna and salts enema—fomentations.* Next morning he was better the enema having acted well, but at 3 P. M. the abdomen was again tender, and 60 more leeches were applied. On the 25th, the tongue being foul, had cal. gr. x. ext. col. c. gr. x. and an injection in the evening, which opened his bowels, and on the 26th he thought himself so well that he would and did leave the house.

On the 30th, four days after his imprudent conduct, he was re-admitted with acute tenderness on the right side of the umbilicus, below which was an ovoid tumour, *looking* like an abscess, but not *feeling* like one—abdomen swollen—pulse 88, small and tense—tongue clean and florid at edges—cough—frequent slimy stools with griping. *Hirud.* 80 *p. dol.* Next day he was no better; abdomen very tender; pulse quick and tense; tormina and tenesmus. *Cal.* gr. x. *to be followed by oil.* The bowels were freely opened, but the patient on the 2nd was much the same: *Hirud.* 40, *fotus.* In the evening the abdominal tenderness and fever being aggravated he was ordered cold affusions to the belly and cold water injections, with relief. On the 3d he was much the same—*cold water continued—blisters to ancles—ipec.* gr. ½. *q. h. h.* The blisters excited great irritation, and the patient was much better on the 4th. On the 6th there was little or no tenderness of the abdomen remaining. Next day the swelling near the umbilicus

was pointing, had a tympanitic sound on percussion, and when *kneaded* the air was heard gurgling in the intestine. A blister was applied, the patient began to suffer from diarrhœa, became feeble, and the following is the report on the 20th.

"Has been lingering ever since the 9th without any material change in symptoms. Abdomen until yesterday remained tense and pointed. Dr. Hodge thinks that an abscess has formed in the peritoneum; two blisters have been applied successively without any marked effect; pulse has continued irritable; febrile exacerbations in the evening; small and frequent evacuations from the bowels; tonics, astringents, and opiates have been given without any advantage. Yesterday afternoon the tumour of the abdomen subsided; patient says that he had at the time a considerable discharge of fluid and flatus, but as the stools had been thrown away by the nurse without examination, it could not be ascertained whether or not they contained pus He is now taking porter and diet to support his strength; all the astringents have failed in checking his bowels; he is now using burnt brandy and galls."

On the 26th an opening formed at the umbilicus through which was discharged about a pint of pure pus. The diarrhœa persisted, cough and debility increased, hectic was fully established, fæco-purulent matter was discharged from the opening at the umbilicus, and death took place on the 1st of August.

Sectio Cadaveris. "On opening the abdomen, appearances of extensive chronic peritoneal inflammation were seen. The peritoneum every where presented a leaden hue; pretty firm adhesions had formed between the folds of the intestines, between the omentum and intestines, and between the liver and peritoneum lining the diaphragm, &c.; the omentum and small intestines, just behind the umbilicus, had become agglutinated, and were united at the distance of two or three inches around the umbilicus to the anterior parietes of the abdomen; a complete sac was thus formed which contained pus and feculent matter; the abscess extended as far up as the liver, and had but two openings, one at the umbilicus and another about the size of a crow-quill, into the small gut; the sac was so perfectly formed that no pus was found extravasated amongst the intestines around it; five or six ulcers, about the size of a ten cent piece, were seen on the *external surface* of the small intestines, but *perforating only the peritoneal coat*, except the one communicating with the abscess; a little abscess was also found near the left groin, in the folds of the mesocolon, around which was poured out about a gill of pus. The mucous coat of the stomach showed some marks of chronic inflammation; that of the small intestines was perfectly healthy, showing the ulcers had commenced on the external or peritoneal surface.

The mucous membrane of the large intestine was extensively diseased; looked as if it had been corroded by strong acid, a great portion of it being removed by ulceration; it was of a light chocolate colour, and much thickened."

This is a well marked example of the ravages occasioned by that most intractable malady chronic peritonitis. Of what date were the ulcerations in the mucous membrane in the large intestines? It must be remembered that on the second day after admission when the pain in the belly *first* commenced, there were tormina and tenesmus, symptoms in fact of irritation, if not inflammation, of the membrane in question. The state of affairs about the umbilicus clearly shews that the ulceration which opened into the *small* intestine commenced on the peritoneal surface. We lately witnessed a remarkable instance of the same fact, and no doubts can now be entertained of such being sometimes the case, though the converse is the most frequent.

XVII.

Observations on those Functional Disorders of the Kidneys which give rise to the Formation of Urinary Calculi; with Remarks on their frequency in the County of Norfolk. By William England, M. D.

Dr. England is evidently a very young physician; but, in this little Essay, he offers unequivocal evidence of a good education—of a respectable acquaintance with ancient and modern authors—and with a considerable talent for observation. All these he has turned to a fair account in the work before us. For reasons not very difficult to be divined, we shall confine our notice of Dr. E.'s book to those sections which result from his actual observations, passing over those portions in which it is natural for a young author to "shew his book-learnt skill."

We believe with Dr. E., that the formation of urinary calculi is not to be explained on chemical principles. We know, indeed, that in a healthy state, the kidneys secrete healthy urine; and when the renal circulation and secretion are deranged, we shall find lithic, oxalic, phosphoric, and muriatic acids in excess, in combination with lime, ammonia, soda, and magnesia. We know further, that in many or most disorders of the digestive organs, the urine becomes turbid and loaded with unnatural, or at least unhealthy products; and therefore it is highly probable that calculous formations are connected with, if not dependent on, disorder of the digestive function, inducing deranged secretion in the urinary apparatus. This seems to be the opinion of our author, and in the 5th section of his work he takes up the subject of diet and habits of life, as exciting causes of renal diseases. The diet of the French, he remarks, renders them more obnoxious to some diseases, and less so to others. The weak and acid wines, the cider, and the small-beer, which form the principal beverages of the inhabitants—in conjunction with the quantities of fruit and vegetables which they devour, dispose them to diarrhœa, in consequence of which M. Broussais has found less difficulty in establishing his doctrine of "gastro-enterite," than he would have found in other countries. Those, indeed, who have had opportunities of observing the hecatombs of trash, both animal and vegetable, which are daily gorged by the French, must wonder how they ever came to be considered an abstemious people. They are the greatest gluttons on the face of this earth—and we have no hesitation in averring that they devour nearly double as much as their English neighbours. But of that we shall say more in some other place.

In Ireland, and in many districts of Scotland, potatoes, oatmeal, and milk, form the chief items in the culinary list, and bowel-complaints are common among them. But Dr. E. thinks, and probably with reason, that this diet is, upon the whole, "more nutritious and more capable of preventing the occurrence of deranged functions, than the aliment upon which the inhabitants of this district (Norfolk) chiefly subsist." The mild and unirritating qualities of this food, he believes, precludes the development of scrofula and consequently of phthisis—diseases which he avers are, upon the aggregate, much less frequent in Ireland than in England. But if the Irish, from the more genial climate of their island, and the unirritating quality of their food, be less disposed to calculous complaints, they are more liable to hepatic affections than their English neighbours—probably from their partiality to the "mountain dew." Still Dr. E. believes that the "poteen" of Ireland, and the "glenlevet" of Scotland, are much less injurious to the constitution than British gin and brandy. Whiskey, he avers, has a tendency to relax the bowels—the other spirits to constipate them. As it appears that calculus is much more prevalent in Norfolk than in any other county of England—and infinitely more so than in Ireland or Scotland, our author, who is a Norfolk man, has taken pains to investigate the modes of life and the diet of his countrymen with the view of accounting for this lithic diathesis.

Norfolk is distinguished for opulence and industry, though the soil is, in many tracts very inferior, and was, not long ago, little more than barren sandy wastes. The working classes subsist almost wholly on farinaceous food—wheat-bread made from flour of as good a quality as that generally used by the higher ranks of society. It is, however, eaten fresh from the oven, when it is more indigestible, and more irritating to the stomach. This bread then forms the breakfast and dinner of the labourer, and is generally washed down with water or tea, milk being scarce. The toils of the day being over, the supper becomes the principal meal. This is "constructed of the same material (wheat flour,) but made into a culinary preparation little known in other parts of England, Suffolk excepted. This is the Norfolk dumpling, formed by adding yeast or ferment to flour, and worked up into a kind of paste. The panary fermentation is then allowed to take place, and the dough is laid a rising (as it is called) for a short time. It is then boiled for about twenty minutes, if the palate of the consumer prefer a light dumpling—or half an hour, if a heavy dumpling be the favourite. Only a comparatively small proportion of potatoes or other vegetables is combined with this farinaceous diet, and the drink is water, or bad beer from the public house." Dr. E. avers that no alimentary preparation is more indigestible or irritating to the stomach and bowels than the Norfolk dumpling. Norfolk being a corn county, very few cows are kept, and consequently the labouring classes have very little milk or butter. The author also remarks that the labours of harvest, of threshing the corn, and of various other domestic avocations in this great agricultural county, throw an undue action on the lumbar muscles, and nothing is more common than to hear them complain of strains in the loins. This overexertion of the lumbar muscles may, he thinks, disturb the functions of the kidneys, and assist in leading to lithic secretions and concretions. Climate next comes to be investigated by Dr. England, and he conceives that the climate of Ireland is as much more genial to health than that of Norfolk, as the immunity of the Irish from calculous affections is superior to that of the inhabitants of the said county. Passing over some observations on medicinal agents in calculous diseases, we shall give Dr. England's general conclusions, containing the pith and marrow of the publication.

SUMMARY CONCLUSIONS.

"1. That the proximate cause of calculous disease is, a certain disordered condition of the capillary vessels of the kidneys, which organs, instead of eliminating from the arterial blood sent to them, the natural secretions, are found to secrete a fluid, the constituent principles of which are different to those of healthy urine.

"2. That the circulation of the blood in these vessels becomes disturbed by the application of morbid stimuli, internally to the mucous membrane of the alimentary canal, or externally to the cutaneous system.

"3. Even in a state of health the constitution of the urine is perpetually changing, owing to the varied irritation of unnatural stimuli, applied externally or internally.

"4. A very frequent cause of calculous disease is, the presence of bad alimentary substances in the stomach and intestines, the sentient surface of which having become morbidly irritable; this irritation is sympathetically conveyed by nervous transmission to the capillary vessels of the kidneys.

"5. The impression of cold disturbing the functions of the skin, and destroying the balance of the circulation, may induce in one constitution dropsy, in another diabetes, and in a third calculous disease.

"6. The inhabitants of those countries, where calculous diseases are most prevalent, are continually liable to functional disorders of the kidneys, from the use of an irritating diet, and from exposure to a cold climate.

"7. The general diet of the great mass of the inhabitants of the county of Norfolk, though composed chiefly of food prepared from wheaten flour, is, owing to the

alimentary form in which it is consumed, much more likely to induce morbid irritation, than the diet of the same classes of people in Ireland and Scotland.

"8. Certain physical characters of the earth's surface, together with the peculiarity of its geographical situation, must always render the county of Norfolk more liable to ungenial vicissitudes of climate than other districts in which calculous diseases are unfrequent.

"9. That wherever phthisis pulmonalis and scrophula are less endemic, calculous diseases are likewise extremely rare.

"10. In hot climates, where the stimulus of heat retains on the surface of the human body a large proportion of the sanguineous fluid, the generation of urinary calculi is almost unknown: the exclusive use of a vegetable diet may probably contribute to their nonformation.

"11. That although alkaline and acid remedies seem to produce their effect by acting chemically upon the constitution of the urine, it is probable that they act likewise as antacids and tonics, by restoring the functional condition of the stomach, and consequently improving the composition of the blood.

"12. That sedatives and counter-irritants act by their stimulus being conveyed through nervous transmission to the disordered renal capillaries, and removing the morbid condition of those vessels, during the existence of which urinary calculi are generated."

We hope Dr. England will prosecute not only this but many other medical inquiries, for which he is evidently well calculated by natural talent and acquired knowledge.

XVIII.

NITRATE OF POTASH IN SCURVY.

In a letter or report from Mr. Charles Cameron, a naval surgeon, to the Navy Medical Board, (with a sight of which report we have been favoured by one of the medical commissioners) there is given an account of a severe scurvy which broke out among the convicts on board the FERGUSON transport, on her passage from Ireland to New South Wales, and which threatened to depopulate the crew, till fortunately it was checked by a solution of nitrate of potash in vinegar, or in a mixture of vinegar and lemon juice. The convicts, 216 in number, were embarked on the coast of Ireland in November 1828, and were then in a low state of health, from deficient nourishment and the depressing passions. Bad weather was experienced on the early part of the voyage, and the convicts suffered greatly from sea-sickness. Their constitutions were thus still farther debilitated, and before the ship crossed the equator, the hospital was full of scorbutic patients, and many othere were confined to bed in a dangerous state. The disease assumed a variety of forms, or rather a number of other complaints became engrafted on the scorbutic diathesis, and were thereby rendered much more formidable. Dysentery, however, was the most prominent feature or form, and affections of the lungs were also very common. Two of the men died of the scorbutic dysentery. When they were preparing to bear away for Rio Janeiro, in order to procure refreshments for the sick, Mr. Cameron tried an old remedy recommended by Patterson many years ago, in his treatise on Scurvy—namely, nitre. The common stock of this being soon exhausted, a supply was procured from the gun-powder on board. The effects Mr. Cameron describes as almost miraculous—so much so that they abandoned the idea of putting into Rio, and pursued their course to New South Wales, where the convicts landed in unusual good health. The formula and mode of administration will be seen in the following extract.

"But I might add that the most distressing symptoms which my patients complained of, in the early stages, namely, a sense of 'oppression and sinking at the pit of the stomach,' were almost invariably relieved, or totally removed, by a few doses of the medicine. The prisoners themselves were so

sensible of its good effects, that I had, for the first time, an opportunity of seeing men crave for medicine, the taste of which was certainly not pleasant; and their complexions were so much improved under its use—changing from a sallow, bloated hue, sometimes approaching to livid, to a clear, healthy colour—that it became matter of surprise to every one.

"The medicine was prepared, and exhibited in the following manner:— Eight ounces of nitre were dissolved in so much vinegar as would make the solution amount to sixty-four ounces. Sometimes equal parts of vinegar and lime-juice were used. A little sugar was generally added to render it more palateable; and about four drops of ol. menth. piperitæ, diffused in a small portion of alcohol, was added to the whole, which rendered it more grateful to the stomach.

"One ounce of this solution was the dose, and was seldom exceeded. From three to eight doses, according to the stage of the disease and the severity of the symptoms, were given at equal intervals during the day—from six o'clock in the morning till eight at night. In general, when the disease was taken early, two or three doses a day, for a week or ten days, were sufficient; but it appeared to me to be always better to commence with three or four doses, and increase the number gradually—daily if necessary. In the advanced stages a much larger quantity may be taken, and is in fact required, than at the commencement of the disease; but although I have often given the solution to the extent of eight ounces daily, and on one or two occasions exceeded this quantity considerably, and have at the same time watched my patients very closely, I never observed any irritation of the stomach or bowels, or any other inconvenience which could be fairly attributed to it. It is, nevertheless, adviseable to dilute each dose with two or three ounces of water when exhibited. While the constitution is thus being corrected and improved, particular symptoms will require the usual attention.

"It is perhaps proper to notice that, about two years ago, I had occasion to give a solution of nitre in water a fair trial in several bad cases of scurvy, where neither vinegar nor lime-juice could be obtained; and, except that sometimes it did not appear to me to sit so easy on the stomach, with the same good effects on the disease.

XIX.

THE MEDICAL PROVIDENT INSTITUTION OF SCOTLAND.

Men, in all classes of life, are now rapidly awakening to the utility—we might say the necessity, of dedicating a pittance of their annual income to some fund or institution that may return a proportionate remuneration to their successors, in case of death, whether sudden or at the natural period. The advantages of assurance societies are are now almost universally appreciated—and there is no class of society that ought more sedulously to attend to this species of provision for their families than medical men. The business of a merchant, of a tradesman, of a banker, may be carried on during bad health of the principal, or even after his decease; but with the medical man's death, his revenue instantly ceases—and even his temporary illness cuts off his income, in a great degree, for the time it lasts. Every thing depends on his personal ability to meet the incessant calls of the public—and a very short suspension of his functions not only detracts a corresponding portion of his revenue, but injures materially the income of succeeding years, however firmly his health may be re-established. This being the case, we are rejoiced to observe the growth and prosperity of a Provident Institution in North Britain, whose principal object appears to be that which is not contemplated in other institutions—a provision for the day of sickness.

"The objects of this Institution are generally—To protect the members throughout their whole lives, and to make provision for their widows, children, or other dependents

after their death. The casualties to which professional men are exposed, are— First, occasional or temporary inability to continue the personal exertions upon which their incomes depend, by reason of sickness or accident; and, second, The more durable or permanent incapacity arising from the infirmities of old age.

"To provide against these, one must either of himself accumulate funds during health and middle age, or join with others in raising a common fund, sufficient to protect those on whom the lot of suffering may fall—the former is not always in the power of professional men, even though their health and vigour should remain unimpaired to a late period of life — the latter has not been acted upon to the extent which the case demands—indeed, so far as relates to a period of incapacity from sickness or accident, the necessary protection *is unattainable in any other Institution.*

"In addition to the dangers to which medical men are subject during their own lives, it is scarcely necessary to add, that their widows, children, and other dependents, must be too often left in a destitute situation, rendered more painful, perhaps, by a few years of prosperity, and by the hopes it has led them to form.

"In no other Institution, accessible to the middle classes of society, with which we are acquainted, are funds established to meet all these contingencies. It was the principal object of the promoters of the Medical Provident Institution to supply this defect. Its scheme embraces the following benefits—I. Health Assurance—II. Deferred Annuities, and III. Contingent Annuities.

"I. *Health Assurance.* Under this head, provision is made for Professional incapacity, whether arising from sickness or accident, and this is combined with a permanent annuity in old age.

"The opportunity of making such a provision will appear in an especial manner highly beneficial to the country practitioner, when we bear in mind the many casualties to which he, in particular, is so frequently exposed in the exercise of his professional duties during long and weary journeys, often in dark and wintry nights, and over almost impassable roads—and to all medical men, when we consider that they have it least in their power to delegate their duties.

"It has been objected to this part of the scheme, that the institution will be liable to imposition, it being impossible in every case to ascertain the truth of the statements of members, especially those residing at a distance, and in the country. Independent however, of the honourable feeling which we believe to exist throughout the profession, the institution, we think, will have ample security in the fact, that no member can have claim to this benefit, 'till five years after his entry, nor at any time for less than two week's illness, nor for more than two years, or 104 weeks in all. Should the disability, whether occurring at different periods, or continuing without intermission, exceed two years,—the member is then placed on the old age annuity, which is only one half of the sick allowance. With such a limitation in view, it never can be the interest of any member to feign sickness; but, on the contrary, rather to save his allowances in middle age, and reserve them as a sure resource during the illness of a more advanced period. Should these be deemed insufficient securities, the fear of detection must ever prove a powerful, if not a complete check—it being one of the conditions of the Institution, that 'the policies become void if the persons assured shall be proved to have made any false statement, or concealed the truth at the time of their entering the Institution, *and if they shall practise imposition afterwards, by feigning indisposition or otherwise.*' Members who assure under this head forfeit the benefits also, if their illness has been occasioned by their own misconduct.

"II. *Deferred Annuities*—or annuities in old age, form the second table in the scheme. These annuities are combined with the health assurance in the former table; but they may also be assured separately, and

may be entered upon at 50, 55, or 60: there is also a payment equal to a whole year's annuity, within three months after death.

"III. *Contingent Annuities*—or annuities to widows or other survivors, form the third table. These annuities contingent on the wife surviving the husband, are too well known to require any description here. They may be granted to others than the wives of members, such as brothers, sisters, or other nominees.

"The Medical Provident Institution is a *mutual* assurance scheme, and the whole funds belong to the assured; and should the rates of contribution be found to be higher than they might have been, the surplus will, in one form or other, be made available to the members, and not carried off by any body of proprietors."

We have not room for the numerical tables; but the following examples will sufficiently elucidate the ratio of subscription, and the advantages which are ultimately to result from it.

EXAMPLE I.

"A person of the age of 25, by a payment of 56*l*: 7: 5 in one sum, or of 3*l*. 7: 10 annually till he attains the age of 60, will be entitled to the following benefits:

1*st*, 1*l*. per week while he is incapacitated by sickness, or other personal disability, from following his profession.

2*d*, An annuity of 26*l*, to be entered upon when he attains the age of 60, and to be continued for life, payable half yearly down to the day of his death.

3*d*, The sum of 26*l*. to his heirs, or others, as he may direct, payable within *three* months after his death."

EXAMPLE II.

"A person of the age of 30, by a single payment of 50*l*. 11*s*. or an annual payment of 3*l*: 5: 2, from that age till 60, will be entitled to the following benefits:

1*st*, An Annuity of 25*l* for life, to be entered upon when he attains the age of 60, payable half-yearly, and down to the day of his death.

2*d*, The sum of 25*l* will be payable to his heirs, or others, as he may direct, within *three* months after his death.

EXAMPLE III.

"A Husband, by a single payment of 104*l*, or an annual payment of 8*l*: 13: 8, during the joint lives of himself, aged 30, and his wife, aged 20, will entitle her, in the event of her surviving him, to an annuity of 25*l*. for her life, payable half-yearly, and down to the day of her death; with 25*l*. more, payable to her heirs, or others, as she may direct, within *three* months after death."

The list of directors embraces many of the first medical men in Scotland, and from the secretary, Mr. David Cannan, 41 Northumberland-street, Edinburgh, all necessary particulars may be learnt. We wish the Institution every success.

XX.

REMUNERATION OF GENERAL PRACTITIONERS.

A considerable sensation has been produced by a recent trial, before Lord Tenterden, in which Mr. Handey recovered a bill of five guineas, charged for a course of medicines and attendance, on the family of Mr. Henson an attorney. The medicines were all specified, and also the visits; but, not the individual or specific charges—merely the sum total. The defendant resisted on the grounds, first the charges were too high—and secondly that Mr. Handey had no right to charge for visits. Lord Tenderden held that "a general practitioner, who did not send useless quantities of medicine, was entitled to remuneration for his attendance." The jury therefore found for the plaintiff.

This is, no doubt, an important decision, as far as a single precedent goes, and where there is evidently no fixed law on the

subject. But it does not set the matter at rest, as some of our more sanguine cotemporaries anticipate. Such a decision as the above would always have been given, and will always be given, by a court of justice, when the demand evinced such moderation and fairness as Mr. Handey's bill bore on its face. But is it to be concluded that, because a jury gave compensation for attendance as well as medicines, the general practitioner has now nothing to do, but pursue the course which Mr. Handey followed? Such a conclusion is very beautiful in the closet; but, as yet, very impracticable. There is another party to be consulted—the patients themselves. Excepting upon very urgent occasions, and one in which a precedent was sought for, nothing can be more dangerous for a medical man than going to law for his remuneration. It must be recollected too, that a patient, although he may not choose to resist the demand of a general practitioner, has the alternative of applying next time, to another surgeon, who acts on a different plan. The fact is, that nothing but a unanimous resolution among practitioners themselves, to adopt the plan of charging for medicine and attendance, can be at all effectual. It is extremely difficult to bring medical men to unanimity in this common cause. Several general practitioners in the immediate neighbourhood of London, have, for some years past, acted on a still better plan than that of Mr. Handey—namely that of making the charge in a single line—"medicine and attendance, from such a date to such a date, such a sum." Still, even here, a few of the older practitioners in the same neighbourhood, hold out for the old plan, and consequently none but those who are firmly and independently established dare to risk the new procedure. We say then, that the law need not, and should not be resorted to, in this case. The general practitioners of each town should meet together, and enter into a resolution to charge for visits, and send a proportionately smaller quantity of medicines. Unfortunately, the jealousies and distractions of medical society offer a strong bar to this community of interest and unity of action, at the present time—and till such simultaneous movement takes place, the judicial decision in Mr. Handey's case will have little or no beneficial effect. Perhaps indeed it may stimulate them to the plan which we have long ago urged on their notice.

XXI.

I. CHRONIC RAMOLLISSEMENT OF THE SPINAL CORD.

One case of this kind which fell under his observation, and one only, is related by Dr. Abercrombie in the last edition of his work upon the Brain and Spinal Cord. The disease, says the Doctor, may go on for a considerable time, sometimes for years, before it is fatal. There is generally some uneasiness in the back, with paralytic symptoms, beginning in a slight degree in a part of a limb and advancing very gradually to confirmed palsy. Most commonly the lower extremities only are effected, in some cases the arms only, in others all the limbs. There is sometimes permanent contraction of the affected limbs, sometimes spasmodic affections of them; and in this manner the disease may go on for many years, "and at last be fatal by ramollissement." The last part of this history seems rather superfluous, for if the disease *be* ramollissement how can it prove fatal by *becoming* such? The varying nature of the symptoms enumerated is sufficient to convince any one, if any one were previously ignorant of the fact, that the only diagnostician of chronic ramollissement of the spinal cord, is the scalpel of the anatomist, post mortem. We suspect indeed that the cases that have fallen under the Doctor's notice have not been very numerous, but *n'importe;* we will give the particulars of the sole illustration from his own practice with which we are furnished.

Case. A gentleman, aged 42, in October

1827, began to be affected with pain in the lower part of the back, stretching round the abdomen, and frequently shooting into the groins. After a short time this was succeeded by coldness and numbness of his feet, which gradually extended upwards with diminished power of motion, until, after several weeks, it terminated in perfect loss of motion of both lower extremities, with retention of urine. There was pain in some parts of the affected limbs, and in others a painful sensation of cold. This perfect loss of power continued five or six weeks, when, after a great deal of treatment by cupping, blistering, &c. he recovered a slight degree of motion, but no power of the bladder. He then began to be affected with spasms of the muscles of the back and abdomen, with a very uneasy sensation of tightness across the abdomen, and at times across the lower part of the thorax. The spasms occasionally assumed the characters of opisthotonos, and at one time he had almost incessant hiccup, which continued in a most violent degree for several days. After the employment of various anti-spasmodics, this subsided under the use of musk. During the course of these symptoms, he frequently complained of pain in various parts of the spine, at first in the lower part, and afterwards higher up; and the feeling of numbness extended gradually upwards, till it reached nearly the upper part of the dorsal region, and was felt in a very considerable degree along the sides of the thorax.

After this he became liable to feverish attacks at night, terminating in the morning by very profuse perspiration, but this was strictly confined to the parts which were not palsied, and there never was the smallest moisture on the lower extremities. He had also, in the upper extremities, a frequent feeling of intense heat, while the lower continued cold and benumbed. During this time a considerable, but very imperfect, degree of motion continued in the lower extremities, but the bladder continued entirely paralytic.

In April, 1828, he went to the country, and at this time he had such a degree of motion as to walk a little on a smooth garden walk, leaning on two persons, or supported by crutches. But soon after this he began to complain of pain in the head. It occurred in irregular paroxysms, and was often referred to a small defined spot, on various parts, especially behind the ear, and sometimes to the tip of the ear. This pain seemed to abate under the use of arsenic; but soon returned, and became more fixed and permanent, and the palsy of the limbs again increased. After an absence of about two months, he returned to town in the beginning of July. At this time the headach was severe, and the power of the limbs so much impaired, that he was entirely confined to bed. In a few days after his return, the right arm became paralytic, and his speech considerably impaired. After a day or two these symptoms rather subsided, but in the following night he became comatose, and died in the afternoon. There never was complete loss of sensation of the affected limbs; he had only complained of it occasionally at particular spots, and of a general feeling of numbness and coldness.

Sectio Cadaveris. Some scales of bone loosely attached to the inner surface of the theca vertebralis—whole cord of a pale rose colour, and in a state of complete ramollissement throughout, being entirely diffluent in every part. A slight degree of softening on the anterior part of the medulla oblongata; a little softening also on the tuber annulare, apparently involving the origin of the fifth nerve (on which side not stated). Beyond this, the ramollissement became again more decided, extending along the crura cerebri and cerebelli, and considerably into the substance of the brain at the part adjoining the crura. Brain in other respects healthy—no effusion in ventricles.

Dr. Abercrombie justly remarks that in such a case as this it is difficult to trace the precise nature and progress of the affection of the cord. The Doctor, as our readers well know, maintains that the ramollissement of the brain originates in a low chronic

kind of inflammation, and evidently argues by implication that it is so with the softening of the spinal cord. It is difficult to imagine how any morbid process can go on without a local action of the vessels, which may be construed by those who like it into inflammation; and if, as some clever men argue, mere growth be inflammation, why we suppose that there is no disputing the matter. But this after all is only begging the question, and such "low chronic" inflammatory action may exist or may not, is, strictly speaking, no inflammation at all; and, practically speaking, is hardly to be treated as such. Several interesting cases are cited by Dr. Abercrombie from Olivia, Andral, and others, but for these we must refer our readers to the work itself.

II. CARIES OF THE ODONTOID PROCESS — FUNGOUS TUMOUR OF THE DURA MATER.

Case. A gentleman, aged 22, of a scrofulous habit; in the early part of his life had suffered amputation on account of a disease of the knee, and afterwards was liable to pectoral complaints with hæmoptysis. In the beginning of the year 1828, he began to complain of pain and stiffness of the neck, referred chiefly to the left side of it, and much increased by the motion of the head. The pain sometimes extended into the larynx, and backwards towards the scapula. After considerable relief from repeated blistering, &c. the symptoms returned, accompanied by loss of appetite, frequent pulse and night perspirations; and soon after this he became affected with difficult deglutition, some dyspœna and hoarseness. There was now also severe fixed pain referred to the back of the head, and much increased by the motion of the parts; so that he was obliged to support his head with both his hands when he had occasion to make any change of his posture. He was next affected with paralysis of the tongue and the upper eyelid of the left side. On the 16th January, 1829, he was seized with paralysis of the left arm, and two days after, the right was affected in the same manner. He had then great pain and difficulty in passing urine, with obstinacy of the bowels, which nothing could overcome. On the 29th, the lower extremities became paralytic, and he died on the 31st, having suffered greatly on the day on which he died, from difficult breathing.

Sectio Cadaveris. External parts of neck, pharynx, &c. healthy—no disease of vertebræ discoverable externally. Brain and cerebellum rather vascular, but otherwise healthy. Within the foramen magnum, and attached to the inner surface of the dura mater at its anterior and lateral parts, was a spongy tumour of a greyish-yellow colour, which, when cut into, presented a variegated structure resembling fungus hæmatodes. The processus dentatus rough and carious on its surface, and so much elongated as to project half an inch into the cavity of the cranium; its ligaments partially destroyed so as evidently to allow it to encroach upon the area of the spinal canal and to compress the cord. The spinal cord at the upper part flattened, but not materially altered in its texture.

It is a consolatory thing to know, that these cases of disease of the upper cervical vertebræ are frequently of a more favourable, or rather less fatal, nature than they appear to be. We have witnessed several instances of recovery, where the symptoms demonstrated the existence of considerable mischief about the second and third vertebræ of the neck, and in one case particularly where an eminent surgeon formed an extremely unfavourable prognosis. Perfect repose, counter-irritation by blisters and especially by caustic issues, the moxa or stimulating liniments when only stiffness remains, and the employment of constitutional remedies according to the general indications, are the means which we have seen of the greatest service. It is in such patients as these, when the frame is delicate and scrofulous, the hectic slight, and the pulse inclined to be feeble, that bark and the liquor potassæ are often of much benefit. They require however to be used with discrimination.

XXII.

ON THE TREATMENT OF CANCER BY COMPRESSION. BY M. RECAMIER, M.D.

The talented physician above mentioned has published two large volumes on a method of treatment which was first brought into vogue in this country, by Mr. Young, in 1816 or 1817, abandoned, after a trial, (whether fair or not we cannot say,) in the cancer ward of the Middlesex Hospital. Dr. Recamier says that the want of success in this country, was owing to the want of a proper mode of applying the pressure—and there may be something in this. At all events, the practical results of such a man as Recamier, should not be despised.

Of 45 cases of cancer of the breast, 30 were treated by simple compression alone—4 by compression and cauterization — 5 by compression and ablation—and 6 by a combination of these three means. Of these 45 cases, 20 were cured—15 remain under cure, and a few of them promise success—10 have entirely failed. The greater number of the patients were females between the age of 30 and 60 years—and more especially between 40 and 50, namely at the turn of life. He met with only one case below the age of 12—and one above 70. Of the foregoing cases 11 were relapses after amputation of the breast before M. R. was consulted. One only relapsed after being considered cured by the author.

One case is mentioned by the author, of cancer of the stomach, which is deserving of notice. A female aged 55 years, had never had an illness of any consequence, except an erysipelas in her legs, which was several times reproduced. She ceased to menstruate at 45, and from that period experienced sad reverses of fortune, and great anxiety of mind. Next she became affected with pain in the region of the stomach, and frequent vomitings of dark-coloured stuff, resembling the lees of wine. Her features underwent a great change—her skin assumed the yellow and sallow tint—marasmus increased—and an oval tumour transmitting the pulsations of the aorta, became established in the region of the pylorus. Solid food could not be taken at all, and liquids were obliged to be given in spoonfuls at a time, on account of the vomitings. All means of relief had failed, and the patient was reduced to the verge of the grave, when a girdle was constructed so as to make pressure on the tumour. This was in the beginning of November. In February following the patient was able to leave her bed, and take to her domestic avocations. The tumour was reduced in size, but the bandage continues to be worn. If this be a true representation, and the tumour be actually a scirrhus of the pylorus, the case is very curious.

In respect to the mode of applying pressure in cancer, much must, of course, depend on the manual dexterity of the applicant. Dr. Recamier tells us that the pressure must be perfectly equal over the whole surface. He has tried various substances, such as chamois leather, cotton, bladders distended with air, disks of India-rubber, &c. but nothing has yet succeeded so well as layers of agaric, cut smoothly, and applied over the swelling. These he retains on the part by bandages of flannel, without seams or selvidges, rather more than two inches in breadth, and eight or nine yards long. He places a disk of agaric on each breast, and then several additional layers on the one affected with scirrhus, locating them so that the centre of pressure may fall on the most prominent part of the tumour. When this last is very prominent, the disk of agaric must be thick in proportion, and vice versâ. The pressure of the bandage cannot be borne by some patients, unless it be very skilfully applied, and his art of application cannot be conveyed in words. It is the *lex non scripta* of surgery, and to the skill of the individual we must leave it.

In respect to the cauterization, M. Recamier employs the concentrated nitric acid as the agent, to each ounce of which he adds a drachm or less of the crystallized nitrate of quicksilver. Arsenic he considers to be dangerous, as he has seen several cases where

its application has been followed by death with all the symptoms of poisoning by arsenic. The pain of the acid cauterization is mitigated by the application of pledgets of lint saturated with laudanum. Verjuice combined with opiates internally appeared to soothe the sufferings better than opium alone.

M. Recamier thinks that relapses of cancer are more common after simple ablation of the tumor, than when cauterization has been employed before the operation by the knife.

In so rebellious and fatal a malady as cancer, the observations of M. Recamier, who is a practical physician of very considerable genius and talents, should not be scouted. We know indeed that the remedy proposed by him has failed in this country, when Mr. Young's method was put to the proof in a public institution; but still we know that other remedies have suffered a similar fate, and been subsequently found deserving of a better one.

And here we may remark a passage in Mr. Bell's report from the Middlesex Hospital, on the inefficacy of compression. The Medical Committee then stated,

"That they had, *in many cases*, succeeded in obtaining great alleviation of suffering—such alleviation as might, perhaps induce more speculative minds less disciplined by experience, to conclude that they had at length succeeded in discovering a cure for cancer."*

Now as Mr. Bell has not, in that report, let fall the least hint of what these means of alleviation (amounting *almost to a cure* of cancer) consisted; and as we cannot charge our memory with any subsequent annunciation of such gratifying information, we do call upon that distinguished surgeon, who, we know well, detests any thing like quackery, to say what those means were, and whether fourteen years of additional experience has confirmed or dissipated the hopes which might naturally be grounded on such a notice, and from such a source.

* First quarterly report of cases in surgery. By Mr. Charles Bell, 1816.

XXIII.

ACTION OF AIR AND PURE WATER ON LEAD.

Dr. Christison, in his admirable work on poisons, has dedicated a section to a consideration of the various ways in which lead is apt to be introduced into the body, by the action of chemical agents on the metal itself.

It is well known that lead is tarnished by exposure to air. This does not arise, as some have supposed, from oxidation, but from a thin crust of carbonate of lead being formed, as may be proved by scraping off the crust and immersing it in acetic acid, when it will be dissolved with a brisk effervescence. The formation of this crust is accelerated by moisture, and probably by the presence of extra-carbonic acid in the air.*

The action of water on lead, which is of much greater consequence, has been observed and recorded since the days of Vitruvius the Roman architect, who forbade the use of lead for conduits of water, because cerusse (he says) is formed on it. Galen also condemns the use of lead pipes. In our own times Dr. Lambe inferred, from a number of experiments, that most, if not all spring waters possess the power of corroding and dissolving lead to such an extent as to be rendered unfit for the use of man, and that this solvent power is imparted to them by some of their saline ingredients. Guyton-Morveau proved that distilled water acts rapidly on lead, by converting it into a hydrated oxide, and that some natural waters, which hardly attack lead at all, are prevented doing so by the salts they hold in

* In a late sitting of the Westminster Medical Society, Dr. Thomson stated, from a number of experiments and observations, that none of the salts of lead, with the exception of the carbonate, are poisonous. Where mischief had resulted from the taking of acetate and subacetate of lead, he believed the cause was the conversion of these into carbonate.

solution. Still more recently Dr. Thomson, of Glasgow, maintained that the lead in waters was not in a state of solution, but only suspension; and believed the quantity in waters which have passed through leaden pipes, &c. to be too inconsiderate to have any deleterious effect on man's health. Dr. Christison determined, therefore to investigate the subject anew.

"Distilled water, deprived of its gases by ebullition, and excluded from contact with the air, has no action whatever on lead. If the water contains the customary gases in solution, the surface of the metal, freshly polished, becomes rapidly dull and white. But if the surface of the water be not at the same time exposed to the air, the action soon comes to a close. When the air, on the other hand, is allowed free access to the water, a white powder appears in a few minutes around the lead; and this goes on increasing till in the course of a few days there is formed a large quantity of white, pearly scales, which partly float in the water, but are chiefly deposited on the bottom of the vessel. In twelve ounces of distilled water, contained in a shallow glass basin, loosely covered to exclude the dust, twelve brightly polished lead rods, weighing 340 grains, will lose two grains and a half in eight days; and the lead will then shew evident marks of corrosion. The process of corrosion goes on so long as atmospheric air is allowed to play freely on the surface of the water, but gradually becomes less and less, provided the water be not occasionally shaken, to prevent the adhesion of the powder to the surface of the lead."

During these changes, a minute quantity of lead is dissolved, as proved by filtration, acidulation, and evaporation. This lead, dissolved by the aerated water, is in the form of carbonate. It dissolves with brisk effervescence in acetic acid, becomes yellow when heated to redness, and the loss of weight then sustained by it corresponds with the atomic proportions assigned for the carbonate of lead.

The solving property of pure aerated water on lead is variously modified by foreign ingredients held in solution. Of these, none are more remarkable than the neutral salts, which all impair the corrosive power of the water; for instance, the sulphates, muriates, carbonates, hydriodates, nitrates, acetates, tartrates, arseniates,—which are all the neutral salts Dr. C. has tried. The degree of this anti-corrosive power differs much in different salts. The acetate of soda is but an imperfect preventative; on the contrary, arseniate of soda is a complete preservative. Phosphate of soda and hydriodate of potass are nearly effectual preservatives. Muriate of soda and sulphate of lime hold a middle place between these extremes, and are both of them much more powerful preservatives than Guyton-Morveau imagined. The preservative power depends not on the base, but the acid of the salt. Those whose acid forms with lead a soluble salt are least energetic, and *vice versâ*.

When the protection afforded is complete, as for example by a 27,000th of phosphate of soda, a 12,000th of arseniate of soda, or a 4000th of sulphate of soda, the lead undergoes no change in appearance or in weight for several hours, or even days. At length the surface becomes dull, then white, and gradually a uniform film is formed over it. This film, examined at an early period, is found to consist of carbonate of lead,—being entirely soluble in diluted acetic acid, although the salt in the solution is a sulphate or phosphate. But after a few weeks the carbonate is mixed with a salt of lead, containing the acid of a part of the neutral salt dissolved in the water: If, after five or six weeks' immersion in a preservative solution of phosphate or sulphate of soda, the film on the lead be scraped off and immersed in diluted ascetic acid, effervescence and solution take place, but a part of the powder remains undissolved; and if the protecting salt has been the muriate of soda, the whole powder is dissolved, but muriatic acid will be found in solution by its proper test, the nitrate of silver.—In all such protecting solutions the lead gains weight for some weeks; but at length it ceases to undergo

farther change, and is not even acted on if removed into distilled water. The crust, when formed thus slowly, adheres with great firmness. The most careful analysis cannot detect any lead, either dissolved in the water, or floating in it, or united with the insoluble matter left on the side of the glass by evaporation. In short, the preservation of the lead from corrosion, and of the water from impregnation with lead, is complete."

Dr. Lambe was of opinion that rain water did not corrode lead; but this is not quite correct. Rain or snow water, before it touches the earth, is nearly as pure as distilled water, and acts with nearly as much rapidity on the lead. But when rain or snow water is collected in a great city, and, consequently contaminated with various principles, its activity is much impaired. The eaves-droppings from Dr. Christison's house, after a fall of rain succeeding to a long drought, was almost entirely inactive on lead;—but, after 12 or 24 hours' rain, (when the gutters, &c. are well washed by the current) the water corrodes as rapidly as distilled water.

"Hence, perhaps, even in a town, but at all events certainly in the country, it would be wrong to use for culinary purposes rain or snow-water which has run from lead roofs or spouts recently erected. When the roof or spout has been exposed for some time to the weather the danger is of course much lessened, if not entirely removed; because exposure to the weather encrusts it with a firmly adhering coat of carbonate, through which, as already observed, even distilled water will not act. But I believe it would be right to condemn the turning even old leaden roofs to the purpose of collecting water for the kitchen. Although the purest rain water cannot act on them when it is once fairly at repose, we do not know what may be the effect of the impetus of the falling rain on the crust of carbonate; and if the crust should happen to be thus worn considerably, or detached by more obvious accidents, the corrosion would then go on with rapidity as long as the shower lasted."

Most spring waters, unlike rain or snow water, have little or no action on lead, because they generally contain a considerable proportion of muriates and sulphates. The water of Edinburgh appears to be nearly destitute of all action on lead;—and we think the good citizens of London need not be much afraid of the painter's colic while they are supplied with water from the Thames, or even the New River. If purity of water be a dangerous property, the metropolis is as secure as if they drank nothing but nectar.

XXIV.

MORBID ITCHING OF THE SCROTUM.

Many works are not adapted for a circumstantial analysis in the Review department of this Journal, but will yet furnish so much information on particular topics as not to deserve being passed altogether in silence. Of such a nature is a book lately published by Dr. Titley.* Though one which we would recommend strongly to the notice of our readers, and especially to the junior members of the profession, it is too elementary for a review or an analysis. We shall accordingly content ourselves with selecting some passages and noticing observations on points not generally understood, and commence with the section on itching of the scrotum.

"The skin of the scrotum is not unfrequently affected with a most troublesome itching. Sometimes this is occasioned by ascarides in the rectum; sometimes by morpiones, or by friction from violent exercise in hot weather; and occasionally from a morbid state of the skin, or superficial glands of the part. In the latter case the scrotum assumes a brown colour, and becomes thickened, scaly, and wrinkled; the itching extends to the skin covering the penis, more especially along the course of the urethra, and the patient has little respite day or night.

* A Practical Treatise on the Diseases of the Genitals of the Male. 8vo. London, 1829.

"When the itching arises from ascarides in the rectum, the remedies suitable for the removal of these should be employed. When it is caused by morpiones, these may be destroyed by strong mercurial ointment rubbed on the part; by washing it with a solution of the oxymuriate of mercury, or by bathing the part freely with a decoction of stavesacre seed. Equal parts of calomel and starch, used as a powder, form an excellent application. If the itching has arisen simply from the excoriation consequent upon friction, a solution of the acetate of lead, or sulphate of zinc, are the most effectual remedies.

"When the disease is dependent on some morbid condition of skin, it is very difficult of cure; it commonly occurs in old men and renders life truly miserable. Sulphur applied to the part, and sulphureous waters taken internally, are sometimes useful; but I must confess that I have often witnessed their unsuccessful employment. In some cases, I have used with much benefit a lotion composed of the emulsion of bitter almonds with oxymuriate of mercury, at the same time giving Plummer's pill at night, with a powder containing a scruple of soda and a drachm of sulphur, three times a day. As a general rule, greasy applications aggravate the complaint, but in two cases I have used, with much benefit, an unguent composed of one drachm of powder of opium, with an equal quantity of carbonate of soda, to an ounce of lard."

XXV.

ANATOMICAL DESCRIPTION OF A CHINESE FEMALE FOOT. By BRANSBY COOPER, Esq.

The *penchant* of the most ancient people of the world for little feet is well known, and the *pains* taken by the Chinese fair to please their liege lords in this particular have been blabbed abroad by the tell-tale pens of curious oriental travellers. Some twelve months back, one of that active class of individuals who live on the love of novelty possessed by the most gullible public of Europe, imagined that he should make his fortune by exhibiting two poor Chinese damsels in the modern Babylon. They were accordingly incarcerated for a season in a little room in Pall-Mall and astonished a few of the British belles, but whether or not the speculation answered is more than we pretend to know. We are not aware that any anatomicnl description of the Chinese female foot is on record, and are therefore tempted to take notice of one by Mr. Bransby Cooper, in the Philosophical Transactions for the present year. It is of course as a matter of curiosity, and that only, but matters of curiosity are no mean articles of consumption in the present day.

The body from which the foot now in abeyance, as the lawyers term it, was taken, belonged to a female found floating in the river at Canton. The subject being from the lower order of persons, art had probably not done so much in producing deformity or beauty, be it which it may, as it accomplishes in the higher class of Chinese. Such is our want of taste that Mr. Cooper remarks, "we should either at first sight consider it as that species of deformity vulgarly called club-foot or the result of some accidental dislocation, which from ignorance and want of surgical skill, had been left unreduced." With what supreme contempt would an aristocratic mandarin listen to such an exposé of *mauvais ton* as this!

"From the heel to the great toe the foot is unusually short, not exceeding five inches, and is said in some instances to measure even less than this; and the great toe itself, which in its natural and free state projects in a straight-forward direction, is bent with a peculiar abruptness upwards and backwards, whilst the remaining toes with the exception of the first phalanx of the second and third, are doubled in beneath the sole of the foot so as to leave scarcely any breadth at this part of the foot, which in the unconstrained limb is commonly the broadest; and

striking shortness of the heel scarcely projecting beyond the line of the leg, which itself descends upon the foot at a considerable obliquity from behind forwards, imparts an appearance to the foot as if it were kept in a state of permanent extension. The upper surface of the foot is very convex; but its convexity is irregular and unnatural, presenting a sudden and prominent projection just anterior to the external malleolus, and above the outer extremity of a deep cleft which traverses the sole of the foot." It is in this latter part, the sole, that the most remarkable alterations are observed, and accordingly our able dissector passes at once to its description.

SOLE OF THE FOOT.

Supposing the body placed upon its back and the foot resting on the heel, the great toe is bent backwards towards the leg, and the second toe is so twisted under it that its extremity reaches the inner edge of the foot. The two extreme phalanges of the third toe are placed more obliquely than the second and consequently do not reach so far inwards, but all the phalanges of the two remaining toes are bent under the plantar region of the foot in such a manner as to produce a visible depression in its external edge. Exterior and posterior to the nail of the third toe is a corn, another large corn in nearly the same situation on the fourth, and two more corns on the fifth. The little toe twisted inwards across the sole forms the anterior boundary to a deep cleft or hollow, extending transversely across the whole breadth of the foot between the toes and the heel. "To judge from its appearance, one might suppose that the heel and toes had been forcibly brought together so as considerably to diminish the whole length of the foot, and to convert its natural longitudinal hollow into that deep concavity. The heel which forms the other boundary of the cleft presents a large square surface, if not entirely flattened, yet with a striking diminution of convexity, so as to suggest the probability that it affords the principal point of support in progression; a surmise which is further corroborated by the great density of the skin at this part."

DORSUM OF THE FOOT.

The appearance of this is completely altered also; the dorsum rising with an unusual convexity not only from behind forwards, but also from side to side. It affords a distinct protuberance just before the external malleolus, and above the outer extremity of the cleft in the sole, which is here very conspicuous; anterior to this eminence, the dorsum presents a plane surface facing outwards, till it slopes off rapidly beneath where the toes are turned under the sole. At the junction of the great toe with the dorsum there is a considerable angle, resulting from the dent or hollow which the abrupt direction of the great toe upwards and forwards produces upon that surface. From this dorsal point of view the two last toes are not seen, they being buried beneath the foot. The only thing worth remarking posteriorly is the extreme shortness of the heel.

"The integuments covering the heel are unusually dense, hard, and resisting, and the cuticle is of a remarkable thickness. The subcutaneous structure resembles rather the fatty sole of a horse's foot than any human tissue. The skin which covers the rest of the sole presents a corrugated appearance and is somewhat thicker than in an ordinary foot: but in those places where it had been defended from external pressure by the intervention of the toes, which passed under it, it does not deviate from the natural construction." On the dorsum the integuments offer nothing unusual, and the only circumstance to be noted is the particular convexity of the nail of the great toe from side to side. The tendons are merely altered in direction, but the state of the bones is very striking.

SKELETON OF THE FOOT.

"The position of the os calcis is very remarkably altered: instead of the posterior projection of the heel, a straight line is preserved in this direction, not deviating from the line of the tibia; and the projecting

point which forms in an ordinary foot the most posterior process, and into which the tendo achillis is inserted, touches the ground and becomes the point d'appui for sustaining the whole weight of the body. The articular surface of the calcis and cuboid bone is about half an inch anterior to, and two inches above this point, while the astragalar joint is behind and somewhat below the calco-cuboidal articulation; consequently the long axis of the os calcis, instead of being from behind forwards, is from below upwards, with the slightest possible inclination forwards. The most prominent points of the instep are the round head of the astragalus, and the cuboidal articulation of the os calcis. From this the remaining tarsal bones slope downwards at nearly a right angular inclination to join the metatarsal bones, whose obliquity is still downwards until they rest on their phalangeal extremities."

The length between the os calcis where it touches the ground and the most anterior part of the metatarsal bone of the great toe, is four inches;—that of the foot, including the toes, 6¼ inches;—height of the instep 3½ inches. Thus the arch of the foot has a span of two inches and a quarter with a height of two inches, which space is filled up with the condensed cellular substance before described. The cleft of the foot is three inches in depth, the greatest width of the foot barely two inches. The points of support are the os calcis, the anterior extremity of the metatarsal bone of the great toe, and the dorsal surface of the fourth and fifth toes, which are bent under the foot so as to press the ground at this part.

Such are the anatomical particulars of this singular deformity, and we are sure that the scientific members of the profession will be much obliged to Mr. Cooper for the trouble he has taken in ascertaining and detailing them.

XXV.

TESTS FOR OXALIC ACID. By DR. CHRISTISON.

This substance has caused, by accident or design, more deaths, of late years, than any other individual poison. Mr. Royston, in 1814, seems to have been the first who introduced it to notice, as a poison taken, in mistake, for Epsom salts—and, strange as it may appear, the accident has become more common, in proportion as people have been put on their guard against it! The publication of its properties now makes it the common instrument of suicide, the certainty and rapidity of its operation rendering it superior to most other poisons. It is ill-adapted, however, for the purposes of murder, for obvious reasons—and yet there is one instance on record, so late as 1827, where a man tried to poison his wife, by giving her oxalic acid in gin! In appearance it closely resembles the sulphate of magnesia, for which it has been so often fatally mistaken. The taste is very different indeed, the sulphate being bitter. In determining the medico-legal tests for oxalic acid—it may be considered in two states—dissolved in water—and mixed with the contents of the stomach or bowels, in or out of the body.

1. In the former state (pure solution) its nature may be determined in the following manner:—

"The acidity of the fluid is first to be established by its effect on litmus paper. This being done the reagents might be applied at once. But it is better to neutralize the acid previously with any alkali; for then they act with greater delicacy. The remainder of the process consequently applies not only to oxalic acid itself, but also to all the soluble oxalates, which will presently be proved to be likewise active poisons.—The tests are the hydrochlorate of lime, sulphate of copper, and nitrate of silver.

Hydrochlorate of lime causes a white precipitate, the oxalate of lime; which is dissolved on the addition of a drop or two of nitric acid,—and is not dissolved when simi-

larly treated with hydrochloric acid, unless the acid is used in very large proportion.

"The solubility of the oxalate of lime in nitric acid distinguishes the precipitate from the sulphate of lime, which the present test might throw down from solutions of the sulphates. The insolubility of the oxalate of lime in hydrochloric acid on the other hand distinguishes the precipitate from the tartrate, citrate, carbonate and phosphate of lime, which the test might throw down from any solution containing a salt of these acids. The last four precipitates are re-dissolved by a drop or two of hydrochloric acid; but the oxalate is not taken up till a large quantity of that acid is added.

Sulphate of copper causes a bluish white precipitate, which is not re-dissolved on the addition of a few drops of hydrochloric acid. The precipitate is the oxalate of copper. It is re-dissolved by a large proportion of hydrochloric acid.

"This test does not precipitate the sulphates, hydrochlorates, nitrates, tartrates, citrates. But with the carbonates and phosphates it forms precipitates resembling the oxalate of copper. The oxalate, however, is distinguished from the carbonate and phosphate of copper by not being re-dissolved on the addition of a few drops of the hydrochloric acid.

"*Nitrate of silver* causes a dense, white precipitate, the oxalate of silver; which, when collected on a filter, dried, and heated, becomes brown on the edge, then fulminates faintly and is dispersed."*

II. By experiments made by Drs. Christison and Coindet, it appears that oxalic acid, so far as concerns the tissues of the stomach or its ordinary contents, is not altered in chemical form, and remains soluble in water. In such solution, however, a variety of soluble principles are contained which would cause abundant precipitates—two of the tests of the process—sulphate of copper and nitrate of silver—so that the oxalates of those metals could not possibly be exhibited in their characteristic forms. Hence the process for a pure solution is inapplicable to the mixtures under consideration. When antidotes are exhibited during life, changes of still greater consequence are effected. Thus magnesia and chalk are the best antidotes for oxalic acid—and if either of these be given in sufficient quantity no oxalic acid will remain in solution. The proofs of the presence of the poison must then be sought for in the solid contents of the stomach, of solid matters of vomiting. The following process for detecting the poison will apply to all the alterations which it may thus have undergone.

"The first object is to procure a solution.—If an antidote has not been given, the contents and tissues or vomited matter are to be boiled, distilled water being added if required. The acid is then to be neutralized with potass and the whole filtered.—If magnesia or chalk has been given as an antidote, the insoluble matter is to be separated by filtration and boiled for twenty minutes in a solution of carbonate of potass in 18 or 20 parts of water. A double interchange of elements takes place between a part of the carbonate of potass and a part of the oxalate of lime or magnesia; and in consequence some carbonate of lime or magnesia is thrown down, while some oxalate of potass will be found in solution. The fluid after filtration is to be neutralized with pure nitric acid.

"Oxalic acid being now in solution, whatever may have been its original state, the next step is to separate it from the animal and vegetable matter dissolved along with it. I have tried various plans for this purpose, but have found none to answer so well as precipitation with muriate of lime, so as to procure an oxalate of lime; which, after being well washed, is to be decomposed by boiling it in a solution of carbonate of potass as before. An oxalate of potass will again be found in solution. The excess of alkali is finally to be neutralized with nitric acid.

"The fluid is now to be tested with the three re-agents for the pure solution of oxalic acid."

* Christison, p. 142.

XXVI.

ANOMALOUS AFFECTION OF THE SCROTUM.

In Dr. Titley's valuable book on the diseases of the male genitals lately published, we find a brief notice of a certain anomalous affection of the scrotum, observed by Mr. Patrick Maxwell in the Island of Antigua.

Case. A gentleman, ætat. 35, who had always enjoyed uninterrupted good health, was suddenly seized in the night with a violent pain in the region of the kidney, fever, vomiting, and purging. His scrotum also swelled much and was very painful. The renal affection yielded to the ordinary treatment, but the swelling of the scrotum defied the doctor. It was as large as a child's head, very much corrugated, and quite red; its cellular structure was distinctly filled with fluid; and the testicle and spermatic cord were distinguished free from disease. By bathing the scrotum in cold water it was very considerably and instantaneously diminished, and in the morning it was nearly the natural size.

It was now determined to make incisions into the scrotum, but instead of limpid water oozing out gradatim, as had been expected, there was a large and continued stream of fluid resembling equal parts of blood and milk intimately mixed together.* The quantity then discharged amounted to upwards of three pints; it first coagulated, and then separated into two parts, a crassamentum evidently blood, and a fluid so exactly resembling milk that it was impossible to distinguish it by the appearance; it had no smell and its taste was a little saltish.

When visited in the evening the patient was as well as usual, and the appearance of the scrotum was the same. The lint being removed from the scarification, the discharge again began in a continued stream, as before, and more than a pint of the same kind of fluid was evacuated. Next morning matters continued the same in every respect; on removing the dressings the discharge of more than a pint of the same fluid again took place; and by the same means a similar discharge was induced, both before dinner and at bed-time. In this manner, for the space of twelve days successively, from three to four pints were drawn off daily. Finding the source of the discharge, like the riches of the kingdom of Prester John, to be inexhaustible, the medical attendants allowed the lint to remain on for twenty-four hours without being removed, and the incision was thus healed. He never found himself the least weakened by so considerable a discharge, but went about as usual.

What became of the fluid after the healing of the incision, we are not informed, but if it went on collecting within the scrotum in the ratio at which it had been let out of it, the gentleman must very shortly have had an appendage, as large as the faith of those who can swallow the story. The patient in fact would appear to have had a perfect land of Canaan in the nether part of his abdomen, for it flowed pretty lustily with milk, though certainly not with honey, as the "stream" was a little *saltish*. When Marco Polo, the celebrated Venetian traveller, accurately described the magnificence of the court of Pekin, and the more than Christian state of a Mongul Emperor, he was thought for many centuries to be taking a traveller's licence. But when Sir John de Mandeville, that prince of liars, asserted that he had witnessed a sea of sand with a river of rocks flowing into it, and added with an oath that it furnished excellent fish, the good folks of the day trusted as implicitly to Sir John, and with as good reason too, as some simple-minded persons do to the Lancet at present. Thus there is no saying in this oddly managed world who are fibbing and who are not, and consequently we should be extremely sorry to assert that we do not believe every syllable of Mr. Maxwell's case. The explanation of the phenomena, we leave to our readers.†

* For what possible reason were scarifications proposed, seeing that the scrotum was reduced to nearly its natural size.—ED.

† This case is absolutely beyond the bounds of credibility.—EDITOR.

XXVII.

POPULAR SUMMARY OF VACCINATION. By J. MARSHALL, Esq. 8vo. pp. 95. 1830.

Mr. Marshall's motto runs thus: "the increase of population is the increase of wealth." Certainly as far as the accoucheur, the vaccinator, and doctors of all kinds are concerned, there may be some truth in the motto; but we much doubt the validity of Smith's dogma generally. Be that as it may, this slender volume has slender claims to notice among professional readers, for although we read it through, during a journey to Hampstead one morning, we were unable to discover any thing new, except the following extraordinary case.

"In August, 1829, a healthy sucking babe, six months old, was vaccinated, in fellowship with twelve other infants, from the vesicles of an eighth day case; the latter number went through the relative degrees of vaccination in the usual style. On the eighth day several of these were confronted with the phenomena of this unusual case. The mother stated that her child had an eruption, which came out the day before (seventh), and wished it to be examined. The patient had, from the effect of the operation, four vesicles on the right arm and three on the left, correct as to form and size, with a pearly hue, but the areola forwarder than is usual on the eighth day, exceeding an inch in diameter. The eruption appeared on the face, extending over the body, but thinly scattered, amounting to about fifty, mostly two or three inches asunder. Each eruptive pock bore a beautiful miniature resemblance, about half the size, of those on the arms effected by the operation; the diameter of each eruptive vesicle exceeded the eighth of an inch, circular, indented in the centre, and elevated edge, the surface of a polished pearly lustre, and surrounded by a rose-coloured areola, half an inch in diameter.

"This eruption may be deemed to be *sui generis*, differing from all others, and by no means partaking of the varioliform type. The case is so extremely rare that no one, it is surmised, has met with its fellow: it yields an exception to a general rule, a departure from the usual law of the disease and the animal economy, in nosology, from its rarity, incapable of classification, and it can only be viewed as a capricious play of nature."

Mr. Marshall strongly recommends at least three punctures in each arm, and informs us that, "in almost every part of the united Empire, either a solitary vesicle, or only one in each arm is formed." If this be the case, it is high time that country practitioners should alter their practice. We wonder where they procure their lymph, if they confine themselves to such paucity of vesicles! Re-vaccination is advised by Mr. Marshall. The extensive field which our author has had, as a public vaccinator, must have afforded him some novel materials, if such existed; but we imagine the subject of vaccination is now completely exhausted, and that, if a Mosely were to rise from the grave, he would not be able to invest it with a single new attribute.

XXVIII.

COMMENTARIES ON THE USE OF LAVEMENTS. By MR. J. SCOTT, Surgeon.*

A residence in France, where the glyster pipe is as common as the tea-pot in England, first led Mr. Scott to pay attention to the subject of lavements, as a simple and salutary mode of soliciting the intestines to evacuate their contents. Reflection led to observation, and this last to a small but useful volume. Mr. Scott thinks that the employment of lavements fell off greatly, and somewhat abruptly, about half a century ago—for, down to that period, they are recommended in every book, and for almost every disease. The modern disuse of this remedial agent in England, he thinks, is

* Octavo, pp. 186. 1829.

principally owing to the "ardour manifested in the prosecution of researches into chemical pharmacy and of therapeutical experiments." It is Mr. Scott's wish to recall the profession to a just appreciation of enemata, and to a sense of the injury which is done to the stomach and bowels by repeated and drastic purgatives. Mr. S. criticises, in a brief chapter, the various instruments for exhibiting glysters, and comes to the conclusion, that Read's syringe is the best. For our own parts, we firmly believe that no apparatus yet invented is superior to the common pewter syringe. But, as neatness, portability, and beauty will always carry the day, even in the humble fashion of a glyster-pipe, we have no doubt that Read's will be triumphant. We agree with Mr. Scott, that the rectum and colon might be made the channels for exhibiting many important medicines, with greater advantage than by the mouth. Opium has a much better and a much greater effect when thus employed than when taken into the stomach. It might be desirable to test the operation of ergot of rye in this way. After various remarks on constipation, and the different diseases to which lavements are more particularly adapted, Mr. Scott gives some sensible and useful directions respecting the kind and modes of employment. These we shall notice in a brief manner.

1. To remove costiveness merely, the object is to break the hardened and accumulated fæces by warm water, or soap and water, a table spoonful of soft soap to the pint of fluid. Water gruel, linseed tea, or other mucilaginous fluids, may also be employed, or olive oil, treacle, sugar, &c. This is the domestic enema.

2. The temperature of the injection should be rather above that of the body, but not much. It should never be so hot as to cause pain, for then it is thrown off too soon.

3. The quantity of fluid is of some consequence. Most people err in this respect. They use too small a quantity. It should never be less than a pint — and often as much as two or three pints. The liquid should pervade the whole of the colon, or even pass the valve. It then stimulates by its temperature, fluidity, and the distension it produces, thus exciting, not only the colon and rectum, but, by sympathy, the whole line of small intestines. If the injection be slowly pushed up, we may easily introduce two or three pints of warm water, before the nisus to throw it off commences. Mr. Scott injected into the bowels of a small female, post mortem, seventeen pints of water, and even then the intestines were by no means forcibly distended.*

4. The best time for the exhibition of enemata is the morning after breakfast. It should be retained till a pretty smart desire to expel it occurs. It is better even to let it remain and be absorbed than to throw it off ineffectually. The slower the water runs up, the more will be received. A sudden distension of the rectum and colon generally causes a sudden re-action and expulsion. The first impulse should always be resisted.

5. Mr. Scott says the bladder should be emptied before the injection is thrown up, as a full bladder sometimes obstructs the operation. In ordinary circumstances, however, this is not essential.

6. It is hardly necessary to state, that various aperient substances may be added to water, when the simple injection fails. Extract of colocynth—salts—common salt—castor oil, &c. may be used in various quantities, according to the nature of the case.

Mr. Scott has appended a copious list of formulæ for the different enemata; and, upon the whole, has produced a book which we should be glad to see as popular as possible, since its diffusion among the public at large would greatly diminish the repugnance which the people of these isles now manifest towards a very useful and important remedy.

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* While this sheet was passing through the press, a medical gentleman of this metropolis narrowly escaped death from obstruction of the bowels, and was saved by an injection of at least six or seven pints of soap and water, which passed the valve of the colon, and gave free vent to the accumulated fæces.—ED.

XXIX.

SEQUEL OF "A CASE OF CAROTID ANEURISM, WHERE THE ARTERY WAS TAKEN UP ABOVE THE TUMOUR."*

Mauritius, Oct. 24th, 1829.

SIR,

I had the honor, on the 9th of last June, to transmit you, by my friend Mr. Thomas Logan, the history of a case of carotid aneurism, which was operated on by me, ultra tumorem, on the 9th March, accompanied with a request, that you would be pleased to communicate it to the profession through whatever channel you might deem most eligible. I also promised that the result of the case should be communicated to you, a promise which I now fulfil.

Toward the conclusion of the case, it was stated "that the patient commenced to walk out of doors; that there was no discharge from the wound, which was on the eve of healing; that the tumour had entirely disappeared from the neck; and that, whatever fate was in reserve for the patient, the aneurism at least seemed to be cured."

June 10th. The patient complains of stiffness of throat, with difficult deglutition, which was attributed to his exposure in the open air after previous long confinement. An anodyne was exhibited and volatile liniment was used without good effect; on the contrary, the pain and stiffness extended to the right angle of lower jaw. A blister was applied and he was purged, with temporary relief.

13th. Slight purulent discharge from the wound; jaw continues stiff, with swelling of the parotid gland and discharge of saliva from the mouth. Emollient cataplasms, astringent gargles, &c.

18th. Wound entirely healed; other symptoms continue. Continue poultice, gargle, &c.

26th. Considerable purulent discharge from the mouth, proceeding from the parotid gland, in consequence of which the gland has become soft and decreased in size From this period, tonic medicines, anodynes and occasional aperients, (as symptoms indicated,) with a light nutritive diet, were given, and the cataplasm or hot fomentations and gargle continued. His health seemed to amend until two o'clock on the morning of the 3d July, when he was suddenly attacked with cough, and expectoration of florid blood to the extent of six ounces, accompanied with sinking of the pulse and every appearance of approaching dissolution. Sulphuric acid, mucilaginous mixture for the cough, &c. were given with some relief. The cough, however, continued, with expectoration at times mixed with blood, as also the discharge of purulent matter from the mouth. The debility increased until five o'clock of the evening of the 12th July, when he expired. At two the following day the body was inspected in the presence of a majority of the gentlemen who witnessed the operation, and several others.

Dissection. In order to expose the seat of the disease with the greatest accuracy; an incision was made from shoulder to shoulder, and another was carried from the centre of the chin to the sternum, dividing the integuments into two flaps, which were thrown up and backward to the angles of the jaw. The muscles separated from the clavicles and sternum, the clavicles separated from their articulations; and the sternum was removed after sawing through the ribs. By these means a perfect view of the parts in their relative situations was obtained.

No vestige of the aneurismal sac remained; the artery and vein were obliterated, the former from its bifurcation, as low as its origin from the aorta, between which and the arteria innominata, a distinct aneurism of the aorta of the size of an orange was discovered; the rupture in the vessel was completely closed by organised coagulated lymph, which had formed an obstacle to the further escape of blood from it into the sac, and in consequence of which the contents of the sac had become putrid and offensive. The right carotid artery had become much

* The former part of this case will be found in No. 23, page 165 *et seq.* of this Journal.—*Rev.*

enlarged. Thickening of the cellular substance surrounding the vessels; extensive adhesion of lungs; watery effusion into the cavities of the chest; pericardium distended, and containing ten ounces of sero-purulent fluid; heart soft, its surface covered by a thick layer of a curdy looking purulent matter, and coagulated lymph; inner membrane of the trachea rough and thickened; the bronchiæ filled with a frothy purulent-looking fluid. An abscess containing about an ounce of ill-conditioned pus at the right angle of the lower jaw, with a destruction of the cellular substance surrounding it and the parotid gland.

The morbid appearances were such, that it is wonderful how the patient survived so long; and although the fatal termination of the case was contrary to my most sanguine expectations, the dissection satisfactorily proved the success of my operation—the artery obliterated, the sac wanting, and no communication between it and the sac of the aortic aneurism.

I have the honour to remain,
Sir,
Your most obedient humble servant,
ALEX. MONTGOMERY,
Surgeon, R.N.
And Surgeon of the Civil Hospital.

To
Sir Jas. M'Gregor, Kt. &c.
London.

Remarks. The first part of this interesting and in many points inexplicable case, will be found in the last quarterly number of this Journal, at page 165 et seq. On introducing the case to the notice of our readers and the profession, we observed that we were indebted for it to Sir James M'Gregor, to whom it was officially communicated by Mr. Montgomery. Had the particulars been published in any other medical Journal of *character*, we should have deemed it a duty to notice them, and express those critical opinions on the question they involve, which the public have in some measure a right to expect from us, and which it would be a proof of incapacity on our part to withhold. But although our own pages have been the medium of the communication, and the author has thus become in some sort our guest, we are confident that neither he nor any one will take offence, if we venture to dissent from his conclusions. If the Arab eat salt with the Giaour the latter is safe; surely if we do the same by Mr. Montgomery, though the salt be somewhat of the Attic kind, we shall 'scape as well as the unbeliever with the child of the desert. Let us try.

We cannot then sympathise with our author in his exultation or satisfaction respecting the issue of the case; we cannot agree that, "the dissection satisfactorily proved the success of the operation." On what does this proof rest? On the fact that the aneurismal sac, one too of very considerable size if it existed at all, had *entirely disappeared* when the body was examined after death. The operation ultrà tumorem is performed for an aneurism, the base of which occupies two-thirds of the sternal portion of the clavicle, whilst the superior border reaches nearly four inches upwards to the angle of the jaw, and in four short months not a vestige of the disease remains; it is gone, dissolved away,—

> And like the airy fabric of a vision,
> Left not a wreck behind?

We ask all who are conversant with pathology and morbid anatomy, whether such a fact squares with their experience; it certainly does not with our's. We ask all who are engaged in practice, and particularly those who have paid attentien to the diseases of the heart and the arteries, whether such a fact agrees with *their* experience; again we say it is contrary to our's. It is possible, (for what is not possible in nature?) but it is not probable—it is not absolutely incredible, but yet we cannot bring ourselves to believe in it—faith is not a voluntary matter with any man, and in the present instance we have none. Credat Judæus. Having thus expressed our sentiments, it is only fair to Mr. Montgomery and to those who may differ from us in opinion, to acknowledge that the case is one of great obscurity, and that though we think there was

not an aneurism, we cannot pretend to explain what there *was*.

But even granting that an aneurism actually existed and was removed, still we must dissent from the conclusion that the operation was successful. The object of a surgical operation, if we reason rightly, is not the mere removal of a morbid part or process *per se*, but the removal of it in such a manner that the individual may no longer suffer from the consequences of it; in other words, the *cure*, more or less perfect, of the patient. Thus if a child labour under fungus hæmatodes of the eye, and the organ be extirpated, it is clear that the disease would be removed, and the operation, according to Mr. Montgomery's reasoning, successful. If, however, we trace the progress of the case, we find that the little patient almost invariably dies, from fungous hæmotodes of the brain, of the other eye, of the cicatrix, or of the liver; in short, from a renewal of the disease in the site of the operation or elsewhere. The operation then, when we look to the *whole* of the case, is not only not successful, but is now very generally abandoned by surgeons as a desperate and cruel measure. To take another illustration;—a patient has his leg amputated for scrofulous disease of the ankle-joint, recovers from the immediate consequences of the operation, but dies in the course of two or three months of scrofulous abscesses in the lungs. The operation in this case was successful, quoad the mere disease in the joint, but unsuccessful in the extended and liberal sense of the term, for the man died of its indirect effects. It is the narrow mode of reasoning we are combating which has been the curse of physic, practitioners theorizing on separate phenomena and neglecting the general bearing of facts, till the practice of physic and surgery has grown a thing of as may shreds and patches as a beggar's coat. The surgeon will pick out his part of a case and the physician his, and between the two the case itself, the common origin of either's speculations, will be plucked as bald as the elderly man with the young and old wife.

But to return to Mr. Montgomery's case. We conceive that, even allowing an aneurism to have been removed by the operation, still the issue of the latter was neither successful nor calculated to encourage surgeons in its repetition. The patient died in four months after its performance, never having perfectly recovered in the interval; and on dissection, there were found the evidences of chronic pericarditis, an aneurismal sac on the arch of the aorta, "much enlargement" of the opposite carotid, hydrothorax, and a putrid abscess at the right angle of the lower jaw. If such be considered by surgeons an encouraging case, we are rather disposed to wonder at, than admire, their taste. It would be interesting, and to a certain extent profitable, to enquire, which of the foregoing morbid appearances were subsequent, and which antecedent in their origin to the operation. The abscess near the jaw is evidently among the former class, and probably so is the dilatation of the opposite carotid. The aneurismal sac on the arch of the aorta would appear to have been of older date, but it would be difficult to determine precisely the age of the pericarditis and hydrothorax, although we should be disposed to rank one or both in the sequelæ of the operation.

Our space is so nearly exhausted that we must waive the consideration of one or two topics connected with the case. We regret that no mention is made of the state of the coats of the aorta, thoracic and abdominal, and indeed the account of the dissection is neither so complete nor so clear as might be wished. It is merely said of the heart that it was soft; the size of its cavities, the thickness of its parietes, and the condition of its valves, not being even alluded to. We regret these omissions, we repeat, because we know, from an experience in these matters by no means inconsiderable, that aneurismal pouches and dilatations of the great vessels at the root of the neck, are in the great majority of cases combined with disease of the heart, especially hypertrophy and dilatation of its left ventricle, and with a morbid state of the coats of the aorta. We have been collecting facts on this subject which may be laid hereafter before the profession; suffice it to say, that we believe a considerable revolution in the treatment of aneurism is impending, and that fifty years

hence many a bloody deed which is now performed upon the arteries as a matter of course, will *not* be perpetrated by our descendants.

XXX.

EPILEPSY CURED BY TREPHINING.

Professor Dudley published some cases of this kind, in the first volume of the Transylvania Journal, and some cases are to be found in our own periodicals. The following is the most recent we have seen. The operation was performed by Dr. Guild, of Alabama, and the case is detailed in a late number of the American Journal of the Medical Sciences.

The patient was Capt. Elliott, aged 40 years, who had enjoyed good health till August, 1827, when he was suddenly attacked with an epileptic convulsion, threatening immediate death. Large bleedings saved him, but epilepsy at intervals of one, two, or three weeks, accompanied by racking pains in one side of the head, and entire loss of sight of the corresponding eye ensued. Various medicines were used in vain, and salivation was raised without effect. The fits became more frequent, and his life was in imminent danger. The trephine was proposed and consented to. The operation caused dreadful pain, and when the diploe was reached a profuse hæmorrhage ensued —that, however, subsided, and the bone was removed. It proved to be "rather of a carious and spongy nature, and somewhat thickened." The dura mater was healthy, and the brain pulsated, with the usual vigour as in health. As soon as suppuration was established, the health of the patient began to improve—the convulsions ceased—and the headach did not return. In thirty days the wound was cicatrized, and he has since enjoyed good health. Dr. Guild assumes it as proved that the cranium was the seat of the disease, "being thickened and thereby producing morbid irritation, congestion and epilepsy." But what produced the blindness of one eye?—and why has not Dr. G. told us what became of this part of the complaint. We have often to lament the loose and inaccurate manner in which some medical men detail their cases, and the hasty conclusions which they draw from inadequate premises.

If the bone was the seat of the disease, is it likely that the trephine took the whole of it away? For our own parts, we are disposed to think that the cause both of the epilepsy and the blindness was in the brain, and that the trephine cured one of them, at least in the way that a seton sometimes does—by inducing a large purulent discharge. It is just possible that a less hazardous wound kept in a state of copious suppuration might have led to the same successful result.

XXXI.

FATAL STRICTURE OF THE COLON.

Organic diseases creep on, sometimes, with a pace as silent and fatal as that of the Indian Band, who, treading in each other's footsteps, give no indication of more than the approach of a solitary individual. So it is with a train of diseases, which are all masked by a single symptom, till the fatal termination approaches. The Editor of this Journal, was called in consultation to a lady in Lambeth, who had been ailing for several months, with torpor or constipation of the bowels, and without any other prominent symptom. The abdomen had been repeatedly examined by Dr. Stanton, but nothing could be detected to account for certain uneasy feelings in that region. Suddenly an aggravation of these feelings was experienced, and to the surprise of the medical attendant, a tumour was felt in the right hypochondriac region. Dr. Johnson was then called in, and attentively examined the abdomen of the patient. A roundish, but not hard swelling was felt in the region of the

caput coli, and, on following the colon, all traces of this swelling disappeared till the middle of the transverse arch of the tube was gained, where another oblong, and densely hard swelling was felt, with a depression in its centre. Both of these swellings conveyed a sense of crepitation, on handling them. Dr. Stanton had come to the conclusion that these tumours were collections of fæculent matters in the colon, and, on mature consideration of all the circumstances, but more especially the sudden growth of them, Dr. J. became convinced that they could be nothing else than accumulations in the colon. On this supposition every means for unloading the bowels, by enemata and laxatives, were assiduously employed, but without the slightest advantage. Vomiting became the distressing symptom, and no substantial evacuation of the bowels could be procured. Sir Astley Cooper's assistance was put in requisition, but without any relief. For seventeen days the unfortunate lady lived, without any effectual passage through the bowels, and with daily vomiting. At length stercoraceous matters were thrown up—nothing could be retained in the stomach—emaciation made rapid progress—and death terminated the scene— the tumours remaining nearly the same as when first examined by Dr. Johnson. Difficulties almost insuperable were thrown in the way of a post mortem inspection. In the middle of the night, when the daughter was asleep, Dr. Stanton and Dr. Johnson proceeded to Lambeth, and examined the body. On opening the abdomen, the intestines were found universally adherent by inflammatory exudation, partly recent, partly of long standing. About the middle of the transverse arch of the colon, the coats of that intestine were half an inch in thickness, and the canal totally obliterated. The end of the little finger could not be forced through, without tearing the parts. From that point back to the valve of the colon, and even beyond the valve, the intestines were enormously distended with fæces. This was the sum total of the pathology—the fons, origo, et finis, of the malady which caused the patient's death. The unfortunate lady had been in the habit, perhaps the necessity, of taking strong aperients, or rather purgatives, for years previously, and there can be little doubt that purgation aggravated the evil, when the stricture of colon was beginning to obstruct the passage of fæces along the narrowing tube. That life might have been preserved, many years, had a system of using enemata been rigidly and daily employed, we are fully convinced, for the liquefaction of the fæces by such measure would have taken off a great source of irritation, and facilitated the diurnal removal of all offending matters.

XXXII.

ELEPHANTIASIS OF THE SCROTUM.

A very good account of this curious disease is given in his recent work,* by Dr. Titley, who appears, during his practice in the West Indian Islands, to have witnessed a good many cases of the kind. Known under different names in the East, in the West, in the African and the American continents, Elephantiasis was for some time considered to be alien to Europe, and never to orignate in the colder regions of the north. This, however, is undoubtedly an error, for affections of the lower extremities, resembling in all essential particulars the Barbadoes leg, are not very infrequent in this island, and in other countries of the continent of Europe. There is at this moment in St. George's Hospital, an instance of the malady in a man who was born in the neighbourhood of London, and who never was out of England in his life. M. Biett, too, in his Clinical Lectures, relates, if our memory serve us, several cases were natives of France were thus effected. Dr. Titley has seen it in an inhabitant of the Orkney Islands, and "understands that it is prevalent in some parts

* On the Diseases of the Genitals of the Male.

of Ireland." The following is an accurate account of the invasion and progress of the disease.

"The attack of this disease is very sudden, and comes on without any premonitory symptoms. A person apparently in perfect health will be seized with severe rigors, attended with acute pain in the head, back, and loins, nausea, and sometimes vomiting. There is also pain in the inguinal glands of one side. Sometimes the right, at other times the left side is affected, but never both together; and the gland which is the seat of the disease in the first attack is generally affected in each succeeding one. The rigors, after continuing an uncertain period, varying from half an hour to two or three hours, are succeeded by pyrexia, in which the skin is intensely hot, more so indeed than in any other fever I have seen. The hot stage usually continues from twenty-four to forty-eight hours, and sometimes longer; during which the patient is often delirious. If the leg be the part affected, as is most generally the case, the pain in the inguinal gland increases; and, if the patient be a white person, there is an erysipelatous blush over the part extending down the thigh; but, if the patient be a negro, there is a slight tumefaction and hardness along the course of the absorbent vessels.

"Sometimes the inflammation is of a more phlegmonous character, and then the swelling in the thigh is more circumscribed, and often terminates in an abscess, which will require to be discharged. The leg swells, and is much inflamed; and as the inflammation increases, the fever abates, and soon goes quite off, whilst the tumefied gland subsides and regains its natural state. The leg continues swelled and inflamed for several days longer, then gradually diminishes, and the patient seems to have again regained his perfect health.

"Sometimes the local symptoms are apparent before the fever sets in; at other times they occur so nearly at the same time that it becomes difficult to say which precedes. The fever makes frequent returns, but at very uncertain intervals; sometimes only two, three or four times a year; in others, once in a month, or three weeks or oftener. It will sometimes return at the end of two or three weeks, and the next time not until three, four, or six months; but whenever it reappears, the disease affects the same part on which it chanced to fall the first time. On each accession of fever there takes place an effusion of lymph into the cellular membrane; the part affected remains swelled for a longer period after each attack. After several returns, the quantity of lymph effused, being greater than can be absorbed, becomes coagulated and ultimately organised, by which the limb or part becomes permanently enlarged, and puts on very much the appearance of being anasarcous, but the swelling does not pit or retain the impression of the finger so much or so long as in a dropsical case. The skin, as the disease advances, becomes rough and rugged."

Patients live for many years with an enormous leg or scrotum, and enjoy good health except during the occasional attacks of fever. The lower extremities are not the only parts affected; the arm, the scalp, the ears, the back of the neck, in some rare cases even the lower part of the spine or os coccygis are liable to be attacked. The scrotum is a very frequent, and the penis an occasional, seat of the affection, although Dr. Hillary makes no mention of either being subject to the complaint. Sometimes it seizes on the stomach, intestines, or brain, producing the same symptoms as when these organs are affected with acute inflammation. Like gout and rheumatism, Dr. Titley remarks that the disease is liable to sudden metastases, and cites two cases in confirmation of his statement. The first was that of a middle-aged female, who had both legs permanently enlarged. The disease suddenly quitted these parts and "fixed upon the lungs," producing dyspnœa, cough, expectoration, which at length was purulent, emaciation, and hectic which ultimately proved fatal. The skin of the legs during this state of things became loose and flabby. The other case was that of a man, one of whose legs Dr. Titley amputated below the

knee. It was nearly as large as one's body, with deep clefts at the instep and ulceration of the foot between the toes, profuse watery discharge, and so much pain as to deprive him of rest both night and day; the other leg was slightly enlarged. The man went on well for nearly three weeks and the stump was almost cicatrized, when the disease "suddenly leaving the remaining leg fixed upon the stomach, producing symptoms precisely similar to those which take place when gout affects this organ;" as in the former instance the integuments of the leg hung loose and flabby. By the aid of powerful stimulants the disease left the stomach and returned to the leg, again distending the loose integuments. Two or three days afterwards he had a second attack which proved almost instantly fatal.

We regret that no post-mortem examination would appear to have been made in either case, and we regret it more particularly in the last. Gout "in the stomach" is, like virtue, a thing much talked of but little seen. Not long ago we saw an instance of this same metastasis of gout "to the stomach," as evinced by the ordinary symptoms of prostration, hiccup, &c. On *dissection* the gout was not found in the stomach at all, but in the lungs; that is, there were all the appearances of a recent and violent peripneumony, the stomach being healthy. We suspect that the translations of rheumatism and gout are not so entirely understood, as our brethren of the empiric school, those who see little of morbid anatomy but practise by tradition, and believe in no wisdom but that of their ancestors, are apt to imagine. Under these circumstances we are sorry that Dr. Titley rests only on symptoms, in proving his statements respecting the metastasis of elephantiasis to particular organs. That a metastasis took place we have no doubt; the *quò* is the question.

"When the scrotum is the part affected, I apprehend that, after a certain time, the lymphatic vessels become so much enlarged and relaxed, that they continue constantly to pour out their contents, so that the tumour increases independently of the febrile attacks. Where the penis is affected as well as the scrotum, these parts enlarge together in an equal ratio; but if the scrotum only be affected, then the penis, as the scrotum enlarges, becomes drawn in, so as ultimately to disappear and become completely imbedded in the tumour; the prepuce being distended elongates, and opens by a navel-like aperture on some part of the anterior surface, or even at the very end of the tumour. There is no limit to the magnitude which tumours of this kind may acquire. The testicles at first may be plainly felt in their natural situation in the centre of the swelling, but in a more advanced stage they cannot be discovered in consequence of the great thickness of the intervening integuments. For the most part they are healthy; though they may be simultaneously affected with any other disease to which they are subject, without reference to this. Hydrocele of one or both tunicæ vaginales is a very frequent occurrence, and the disease may be complicated with hernia."

There are many remarkable cases of this disease on record. Dionis, Cheselden, Walther, and Morgagni make mention of affections of the scrotum that can only have been of this description; but Chopart relates the most remarkable instance of any, in the person of a negro of the Coast of Guinea, who had lived for twenty-two years in Martinique, was fifty years of age, and whose scrotum weighed forty pounds, and reached to his ankles. M. Raymondon removed a tumour of this kind weighing twenty-nine pounds, and the patient died in the course of six hours. Nubert de Lounes also removed one of thirty pounds weight from the celebrated Charles de la Croix, formerly minister for foreign affairs in France, and with success. Baron Larrey describes the disease under the name of sarcocele, and says that all the patients were also more or less affected with elephantiasis. In one individual seen by the Baron, an agricultural labourer from Upper Egypt, the scrotum was computed to weigh fifty pounds; and in different parts of that coun-

try M. Larrey witnessed ten or twelve others nearly as large. This able old surgeon removed such a tumour of an oblong form, weighing three pounds, from a cook in a convent of Capuchins in Grand Cairo. In a case related by Dr. Hendy, where the enlarged scrotum was twenty-four inches in length and six feet in circumference, and where the left leg was also slightly enlarged, the patient died from mortification of the part. Dr. Hendy states that five other cases had come within his knowledge, where the scrotum became much enlarged, sloughed, and left the testicles entirely denuded.

Passing over a case by Mr. Corse, and one of elephantiasis of the penis by Mr. Wadd, we may mention that one was published in the sixth volume of the Medico-chirurgical Transactions, in which our author amputated the enormous scrotum with success. Subsequently to this, our author assisted Dr. Caines in performing the operation on three patients, in one of whom the enlargement of the scrotum was complicated with hernia on the right side. All the patients recovered. Four other operations for elephantiasis of the scrotum by Dr. Titley were attended with a similar fortunate result.

"But the most remarkable tumour of this description, which I have either seen or heard of, was attached to a man belonging to the estate of the Rev. Mr. Verchild; and from this the late Mr. Wilkes endeavoured to separate the unfortunate possessor on the 6th February, 1815. I was accidentally prevented from being present at this operation, but the following particuluars were communicated to me by Mr. Wilkes. The length of the tumour was two feet five inches; its circumference five feet ten inches; and its weight one hundred and sixty-five pounds avoirdupois. The operation occupied *nearly eight hours*, and the man died apparently from exhaustion towards its conclusion; a copious venous hæmorrhage followed each stroke of the knife; the lymphatic vessels were very much enlarged and were apparent, traversing the tumour. My friend Mr. Jordan, of Weymouth-street, at that time stationed in St. Christopher, as surgeon to the forces, was present, as were also Messrs. Richards and Waterson of the 15th regiment, and Dr. Clifton, a practitioner of the island. The operation was likewise viewed by several gentlemen not of the profession, and the tumour was seen by the Rev. Mr. Verchild and Mr. Goldfrap.

"I once assisted at an operation of this kind which terminated unfavourably. The tumour in this case measured in length twenty inches, and in circumference forty-four. The patient was a young man, and, although anxious for the removal of the tumour, yet he was under a state of great alarm, as was evident both from his countenance and manner. Notwithstanding the operation was performed with great dexterity and celerity, not having occupied half an hour, and the hæmorrhage was very trifling, yet the poor fellow most unexpectedly died on the table.

"Whilst these swellings are yet of moderate size the operation is comparatively easy; but when they have attained a magnitude approaching to that of my first case, then it becomes, probably, the most laborious piece of dissection that occurs in the practice of surgery."

Our author relates the particulars of two more successful operations, one by Mr. Liston, from the nineteenth volume of the Edinburgh Medical and Surgical Journal; the other by Dr. Wells of Maracaybo, Colombia, from the American Journal of Medical Sciences for May, 1828.

ELEPHANTIASIS OF THE LABIA PUDENDI.

Baron Larrey observes, that no author with whom he is acquainted has spoken of a similar disease as affecting the female parts of generation, and accounts for it by supposing that the periodical evacuations of that sex prove their safeguard. The worthy Baron, however, adds that, as if by a frolic of Nature, a female of Grand Cairo, named Ammeh Fatuomy, furnished a well-characterized example of sarcocele of the labia pudendi. The Baron proposed extirpating the diseased parts, but receiving a sudden order to join the army on its march to Alexandria,

he was necessarily prevented from executing his design.

Dr. Titley has seen only one example of elephantiasis in the labia pudendi, and that was in a young negress. The parts were very much enlarged, and were amputated by Dr. H. M. Clifton of St. Kitt's; they weighed one pound—no hæmorrhage took place, not a vessel was secured, and the wound healed kindly.

A third case was operated on by Mr. Liston. The woman, named Smith, was about thirty years of age, and applied to Mr. L. on account of a large tumour attached to the labium. It had been growing four or five years, and from its size had at length rendered her almost incapable of following her employment. The removal was attended with considerable difficulty, on account of its neck extending along the vagina for some distance into the pelvis. The attachments of the tumour to the sphincter vaginæ were so strong as to be separated with difficulty, and, after this was accomplished, the contraction of the orifice was very remarkable. The tumour weighed upwards of ten pounds. The case terminated very favourably, and the woman now enjoys perfect health.

This brings our notice of the chapter on elephantiasis of the scrotum and labia pudendi to a close. Our author has evidently seen much of a disease which is perfectly new to many medical men in this country, and which is more often met with, no doubt, than understood. If he makes no mention of any curative means, except the knife, it is probably because he knows of none, and such a proceeding is more honest than frequent. In the elephantiasis of the extremities compression is certainly useful in some cases, but such a plan of treatment is inapplicable, or nearly so, to the scrotum. The knife would appear to be the only effectual remedy, and the number of successful cases that we have mentioned, hold out a very favourable prospect to the operator and the patient. It is only in the *very* great enlargements of the scrotum, that serious or fatal consequences would seem to have followed the operation.

XXXIII.

HYPOCHONDRIASIS.

We are apt to believe a merry companion the happiest fellow in the world, and envy him, perhaps, his light heart and airy spirits; but such men have hours of melancholy, when the spirits sink, and a gloom comes over them, deeper and darker than is ever known to their less excitable companions. A man may be cheerful on paper, though he has a heavy heart, and brilliant in company, though insufferably wretched when left to commune with his own soul.

The extremes of low and high spirits, which occur in the same person at different times, are happily illustrated by the following case, related by Dr. Rush:—"A physician, in one of the cities of Italy, was once consulted by a gentleman who was much distressed by a paroxysm of this intermitting state of hypochondriacism. He advised the melancholy man to seek relief in convivial company, and recommended him in particular to find out a celebrated wit by the name of Cardini, who kept all the tables of the city, to which he was invited, in a roar of laughter, and to spend as much time with him as possible. 'Alas! Sir,' said the patient, with a heavy sigh, 'I am that Cardini.'"

XXXIV.

SANE OR INSANE.

From a long and sensible Letter in a Scotch periodical which we know to be written by a physician of great talent in the Modern Athens, we have made some extracts, as we are sure they will be read with interest in this country.

"Regarding the question of the sanity of a fellow-creature as one of the most sacred and important to the decision of which a medical man can be called, and as that on which of all others, it behoves him most to guard himself from the bias of feeling and of prejudice, we cannot but regret the bitter-

ness of spirit under which the London Journals have been writing; for however easy and popular the task of exciting public clamour may be, it is certainly not the way to forward the cause, either of humanity or science. Instead of doing good, which we are willing to believe is their object, by dropping out of sight, as in the present instance, the essential facts and principles from the examination of which alone truth could be elicited and errors exposed, they give countenance and strength to existing prejudices; and by the obloquy thus thrown upon a whole class of the profession, they help to prevent men of high talent, honourable principle, and extensive acquirements, from devoting themselves to a department of medical science in which these qualities would be of the highest value. They do harm also by throwing difficulties in the way of obtaining conscientious testimony on future occasions, and for want of which a *real* lunatic may, under the influence of selfish and designing men, be allowed to go on squandering to the last farthing, and to bring himself and family to misery, starvation, and disease.

Differing entirely, then as we do, from our London brethren in our mode of treating the evil, we heartily concur with them as to its existence and magnitude. It cannot, in truth, be denied, generally speaking, that medical men are very little acquainted with the nature of insanity; and that therefore it becomes them to speak with diffidence on every subject connected with diseased mind. Neither can it be denied that reason and humanity call aloud for the revision of that unjust and barbarous law, which authorises the confinement of a fellow-creature on the simple certificate of any two men, however ignorant or dishonest, and in whatever rank of the profession they may be; but still we cannot help thinking, that an ordinary journalist, who has avowedly paid *no* attention to, and knows *nothing* more about mental derangement, than any ordinary observer of human nature, would more effectually bring about a reform by calmly though earnestly pointing out and soliciting attention to apparent deficiencies in the evidence; to sources of error or obscurity; or to the causes of conflicting testimony; by, in short, throwing all the light upon a difficult subject which his talents and acquirements may enable him to do, than by following the opposite plan of rashly dealing out judgment and condemnation on a class of men, who, whatever their faults may be, have paid at least *some* attention to the subject, and know at least *something* more about it than himself; and who, whether we consider the talent and qualifications required for the proper fulfilment of their duties, or the deep importance of the cases entrusted to their care, ought as a body to be raised rather than depreciated in public estimation. But leaving this part of the subject, we have still some remarks to offer on the *principle* lying at the root of the whole inquiry, and not yet, so far as we are aware, sufficiently brought forward.

Without pretending, at this distance, to decide whether Mr. Davies was really sane or insane, we are inclined to suspect, from the published accounts, that, as is usual in most disputes, both parties were somewhat in the wrong; and that, while the newspaper writers erred in holding him to be of perfectly sound mind, the *Mad Doctors* erred in not having given a sufficiently explicit or correct view of the doctrine of insanity. It is one thing, for instance, to determine that a man's mind is in a state of disease, but it is another and very different matter *to determine to what extent the affection has proceeded, and whether it involves only one, or a few, or the whole of the mental powers.* In the case of the stomach, for instance, we can if asked the question, say very certainly, even in a slight disturbance of its function, that it *is* in a morbid condition; but that is very far from necessarily implying that it *cannot* digest food at all, or that digestion is *entirely* deranged. In like manner, abstractly speaking, some of the manifestations of the mind may be positively deranged, but still the patient be competent to the ordinary affairs of life. For insanity is not a specific state, always marked out by well defined lines, which, when it occurs, necessarily unfits a

person for mingling in society and in business with his fellow men; but, like affections of other organs, it is a morbid state which may manifest itself in every possible degree, from the most obscure to the most striking departure from mental health. Every body knows, for instance, and the Mad Doctors as well as the rest, that an individual may be *palpably and incurably insane* on all subjects hingeing upon one or two faculties of the mind, and yet be perfectly rational and sound on all others, and that in all matters of thought or of business, which do not touch upon that point, he may continue for years, and even for the remainder of a long life, to display as much shrewdness, prudence, and good sense as nine out of ten of those who never had the fear of a strait-waistcoat before their eyes, and every one conversant with the insane is aware that in practice every possible gradation is to be met with, from an isolated affection like the above, to one involving *all* the faculties of the mind. And consequently the true problem to be resolved, where the rights of liberty and of property are concerned, is not so much whether mental derangement exist, but *whether it has extended so far as to deprive the individual of the power of sound judgment in his own affairs.* Numerous cases, indeed, exist around us of partial affections of the mind which do not interfere in any marked degree with the business habits of the patient, and in which, therefore, it would be the height of cruelty and injustice to deprive him of civil or moral liberty, but in which, at the same time, every conscientious physician, if judicially examined on the abstract question of the existence or non-existence of insanity, would be obliged to answer in the affirmative. Many circumstances indicate this to have been the state of Davies. Some of the witnesses prove that he entertained the most extravagant notions of his own powers and importance, and that he habitually boasted of receiving illumination from Heaven, of being the Son of God, and of being under the special charge of supernatural beings, &c. It is also proved that he was frequently flighty, wild, and incoherent, all of which symptoms might arise from morbid excitement of the single feeling of self-esteem, without the other faculties necessarily participating in the disease. And accordingly we have other witnesses, who were in the habit of transacting business with Mr. Davies, giving it as their decided opinion that he was *not* insane, because "they had taken instructions from him on business, and never had met with a client who better understood his own affairs." Keeping the above distinction in view, we can see no difficulty in believing that Dr. Burrows and his brethren, in saying *on oath* that his mind was *not* sound, were giving not only most conscientious but most true testimony; and that the jury and journalists, *holding competency to business as equivalent to Sanity*, were equally conscientious and correct in pronouncing him to be sane. But if this be the true solution of the contradictory opinions laid before the world, it shows how careful we ought to be in understanding each other's meaning; lest, like the two knights of the olden time, we come to blows about the colour of the shield, when, if each had looked at the other side he would have seen that his opponent was right as well as himself.

There is another condition involving all the faculties of the mind, which may give rise to conscientious difference of opinion, and in which the same distinction ought to be observed. It occurs chiefly in persons of a highly excitable and irritable temperament; who, from trifling causes, are carried away by trains of thinking or idiosyncrasies of feeling, which less susceptible persons experience only after a succession of the most powerful impressions. Persons so constituted pass years of their lives apparently on the verge of insanity, without its ever becoming decided, unless a hereditary predisposition exist, in which case they generally sooner or later lapse into lunacy. In the mean time, however, they are remarkable for unequal spirits, for doing odd things and manifesting strange feelings, but, upon the whole, they conduct themselves so much like other people, that although every one remarks that they have their peculiarities, few will venture to pronounce them *insane.* But in such cases, when the transition to insanity does occur, it is so gradual, that the

most experienced physician, even after maturest examination, is often left in doubt as to the extent to which the disease has proceeded; and while he feels that the individual is not in a condition to be left entirely to his own guidance, he is at the same time conscious that he retains too much soundness of mind not to be injured by the premature interference either of friends, of doctors, or of lawyers.

The point of difficulty for the physician, therefore, and that for the solution of which we would most ardently long for the assistance of an intelligent jury, is to determine, not the mere existence of a mental affection, but *the limit at which that affection begins to deprive the individual of the power of proper self-direction, and at which, therefore, it becomes the duty of the law and of the friends to step in for his protection.* The right solution of this problem is no easy task, for it requires in the Jurors not only clearness of perception and soundness of judgment, but a knowledge of human nature, and an acquaintance with the general functions of the body, and with the previous habits and constitution of the suspected lunatic, which unhappily, under our imperfect systems of general education, very few persons are found to possess. And it is in vain to seek for any general rule to help us out of the difficulty, for every human being presents so many points of difference in mind and in body, and in the external circumstances modifying both, that every new case requires the same partial examination, the same careful analysis, and the same accurate consideration of all the attendant phenomena as the first that ever occurred to us, and he who, disregarding all these conditions, hastens to form his opinion from the application of general rules, will inevitably fall into error, and be the cause of much misery to those who confide in him. But not to encroach too far on the patience of our readers, we shall conclude, trusting that we have said enough to satisfy our brethren that they have been too rash and reckless in exciting a clamour against the profession, and that the question in debate, is really not so easy of solution as they seem to have imagined."

XXXV.

INJURIOUS EFFECTS OF TIGHT LACING. By DR. GODMAN.

"It is not without hesitation that the writer ventures to call attention to the injuries produced by TIGHT LACING, being well aware that he is exposing himself to the chance of severe animadversion for appearing to meddle officiously with the concerns of the fair sex, who never fail to punish every encroacher upon their rights and privileges. Notwithstanding, as our object is, if possible, to avert great suffering and much future misery, by setting forth the evils following manifest abuses, introduced and augmented by fashion, we hope due indulgence will be extended by our fair readers, whose real good we are most solicitous to promote.

The observations of various authors have satisfactorily shown, that certain errors in dress and exercise induce deformity of person and unhappiness of mind; but their attention is almost entirely devoted to the injuries done to the organs of support and motion, the bones and muscles.* Great as are the evils they treat of, they seem slight when compared with the pernicious effects of similar causes, on organs more immediately essential to the life of the individual, the disarray of which, though not signalized by very obvious deformity, is inevitably followed by protracted debility and suffering, an early, rapid decay, or a painful and premature death. It is impossible for a benevolent mind, acquainted with the reality and extent of the mischief thus produced, to behold youth, grace and beauty sacrificing the

* See the works of Shaw, Duffin, &c., on Deformities of the Spine, &c.

dearest boons of life to the tyranny of perverted taste and preposterous fashion, without experiencing emotions of profound regret for the immediate victims, and sighing for the future condition of a posterity derived from such a parentage!

In what way can the hitherto irresistible torrent of fashion be stemmed? Have not reason and experience been appealed to in vain? Have not the shafts of satire, the serious remonstrances of morality, and even the awe-inspiring declarations of religion, too often fallen ineffectual to the ground? One mode of producing the desired conviction in the minds of females, has been left almost unattempted; and from the operation of this method much is to be hoped. It is by imparting to "nature's last, best work," a sufficient knowledge of the peculiar construction of the human system, to place in the clearest light the dreadful risks those run who indulge in the vices of dress, and the cruel maladies which are certainly induced in delicate frames by such as persist in disregarding the warnings offered by reason and science. To us it appears scarcely possible that a female of ordinary intelligence can become even superficially acquainted with the curious actions necessary to the process of breathing, circulation, and nutrition, without shrinking in terror at the thought of the dangers to which those are exposed, who intentionally counteract nature in all her benevolent designs, by violently compressing their persons, according to whatever model capricious and ever-varying fashion may dictate.

That part of the human frame most immediately subjected to tight lacing, is not only one of its most lovely external proportions, but contains and defends the organs so important and indispensable to existence, the LUNGS and HEART, which perform the functions of respiration and circulation, to purify and perfect the blood, and send its rich and vivifying streams to the remotest extremities of the system. On the perfect action of these great organs depend all our vigour and elasticity; the roseate bloom and radiant eye of beauty; the joyous buoyancy of youth, and the steady sereneness of maturity. When these functions are impaired, pallid features, anguishing debilities, melancholy depression of spirits, agonizing decay, and a long train of ghastly maladies, destructive of hope, and rendering life a burthen, must necessarily ensue.

The part of our structure to which allusion is made, is popularly called "the chest;" and to judge them by their practice, many of our fair country-women regard it as a mere empty, flexible case, which may safely be squeezed into whatever compass the possessor pleases. Unfortunately for them, this is far from the reality; the chest is an admirably complex contrivance, whose free motions are as necessary to breathing and circulation, as these processes are to health and life. Consequently, whatever diminishes the capacity of the chest, proves directly injurious by excluding the air, and every impediment to its movements prevents the proper transmission of the blood through the lungs.

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As all the parts described [those concerned in forming and filling up the chest] are flexible and moveable from their peculiar nature and connexions, it is obvious that the first effect of any tightness or constriction will be to impede their proper motions, and thrust them out of their natural position. Thus, the corset being laced tightest at the part of the chest having the shortest ribs, the longest and most flexible cartilages, and the most extensive motion, produces narrowing of the chest, renders its free movements impossible, and permanently deforms it by doubling the cartilages inward near their junction with the breast bone. As if this mischief were not great enough, another instrument of torture is added, in the form of a steel or hickory *busk*, which is pushed into its sheath in the already too tight corset, immediately over, and extending along, the whole length of the breast bone. This busk is to keep the body from bending forward in the centre, and to prevent the dress and corset from 'hooping up,' as it is called. As

the body cannot possibly be prevented from leaning forward to a certain degree, the consequence is, that the whole weight of the superior part is sustained upon the lower part of the breast-bone, which leans directly against the busk, at a point where it is least supported by the attachment of the cartilages of the ribs. The point thus injuriously pressed upon, is nearly opposite the lesser end of the stomach, and most of those who habitually lace tight, have a depression here which would contain the size of half an egg. Either a constant feeling of aching and soreness is experienced at this point, or when the busk is taken out, it is so sore and painful that the individual cannot bear the slightest pressure without an exclamation of distress.

We have, then, among the first effects of the tight lacing and pressure of the busk, impairment of motion and deformity of the chest, accompanied by a constant soreness and irritation over the stomach, whose undisturbed action is one of the greatest essentials to health. If, however, this was the sum of the evil, we might regard it as tolerable, being apparently external. But when the lower part of the chest is compressed, the liver is by the same force squeezed upwards and inwards, and, being a large and solid body, it pushes before it the diaphragm, and forcibly prevents its descent in the act of breathing; while on the other side, the spleen and stomach are forced upwards, producing a similar effect on the diaphragm; and the functions of all these organs, the liver, stomach, and spleen, must be impaired in proportion to the pressure and displacement their delicate nerves and vessels suffer. In addition to these greater or more obvious injuries to the functions of individual organs, we may now add the evils caused to the great vital functions. The same pressure which forces the liver, &c. inwards and upwards, by squeezing the texture of the organs together, prevents the free entrance of the blood into them, and by being thrust firmly back against the spine and lower part of the diaphragm, they compress the openings by which the blood passes to and from the heart, through the great vein and artery. The consequence of thus damming up the vital current, is the gradual development of irregularity of action in the heart, palpitations, tendency to faint, violent throbbings, and in some cases organic alteration in the heart itself. This same tightening of the lower part of the chest, and prevention of the enlargement of its cavity by stopping the descent of the diaphragm, acts with equal injury on the blood which should descend from the great veins of the head and arms to the heart at each breathing. The proper quantity of blood cannot be delivered therefrom, for want of proper dilatation of the chest, and the individual is subject to violent headaches, dulness, low spirits, extreme paleness, or leaden hue of countenance.

These readily observable consequences are but the commencement of ills from this source. The lungs being withheld from their proper actions by not being sufficiently dilated, the air cannot get access to the blood, and the blood cannot receive that purification or elaboration which renders it fit to sustain the body in health. Its watery, carbonaceous, and other impurities, are retained instead of being thrown off, and in place of a brilliant vermilion-coloured fluid being sent to the left side of the heart for the general system, it returns of a dark or bluish red, scarcely better than when it entered the lungs, and almost utterly unfit for any of the purposes of life. This condition, if kept up, is soon made sensible by defective energy in all parts of the body, by various local diseases, and slight morbid changes, sufficient to render life irksome. Cold extremities, pale visages, troubled sleep, excessive mobility of system, commonly called *nervousness*, evinced by great agitation from very inadequate causes, &c. are among the most generally obvious consequences of such impairments of function.

To say nothing farther of the actual mischiefs which tight lacing produces, the influence it exerts on all the motions of the body is entirely disadvantageous. Can any

thing on earth be more ungraceful than the gait, the walk of a female who is extremely corsetted? From the shoulders down, as stiffly inflexible as the parlour tongs, she can only advance by a sideling shuffle of the feet, which appear to get forward by stealth, instead of moving the body with that elastic mobility characteristic of its unrestrained natural condition. Instead of the easy graceful inclination of a flexible form, we have an awkward ungainly attempt to balance the body on the limbs; the shoulders stiffened backwards, as if shackled with iron; the chest girded in, till breath can scarcely be drawn; and the trunk of the body as rigid as if carved in wood,—the figure looking like a caricature upon nature, ease, and grace! When ladies in this trim enter a room, especially after walking, they can scarcely speak for several minutes, and their bosoms heave with an unnatural agitation. If the busk be of the *fashionable* length, it is impossible for them to sit comfortably in a chair; they must perch on its outer edge, to prevent the busk from being pushed towards the chin, &c. All this torture, uneasiness, and inconvenience, is patiently endured, and for what? because it is fashionable! Grace, ease, elegance, and comfort, are alike immolated to this Moloch, who spares none who pretend to the rank of *fashionable!*

In persons of somewhat more robust frames, the use of tight corsets is followed by a very severe pain, which is experienced at the time of taking them off, and rather different in kind from that we have mentioned as occurring to delicate females. The pain in this case is caused by the return of the blood to the parts which have been violently compressed by the corsets, and enjoyed but a partial circulation while they were worn. It is exceedingly acute, and requires the corset to be very gradually loosened. Some idea of it may be formed by those who have occasionally taken off a very tight garter or other ligature, which has been worn for some hours. We feel less commiseration for such sufferers, who have not the shadow of excuse which is offered by the delicate; they do not need support, and are merely solicitous to make a "figure!"

Very probably it may be urged that the evils we have indicated are confined to a comparatively small number, and that a much greater proportion of females wear corsets without suffering these inconveniences or injuries. However true it may be that some persons use corsets with impunity, it does not in the least diminish the force of the well-founded objections made to them in the preceding observations: it may be said with equal truth, that numerous individuals use spirituous liquors, or amuse themselves by occasional gaming, without injury; yet we know that the vast majority of mankind are but too prone to pass from the use to the abuse of both the latter; and as in the case of spirituous liquors, the transition from the use to the abuse is frequently so gradual as to be nearly imperceptible until the severest evils are produced, so it is most probable, especially in young persons, that the use of corsets and busk will speedily and imperceptibly advance to their abuse. There is one circumstance, moreover, which should be particularly remembered, which is, that although ladies properly educated, and aware of the danger of misusing corsets, might employ them without especial injury, the females of lower ranks in life, who imitate what they *see* in those above them, without reference to cause or consequence, will almost inevitably be led to do themselves the worst injuries. We see daily confirmation of this in the attempts of female attendants, &c. to imitate their employers, in the article of *lacing* at least, nor is it at all uncommon for such young women to be obliged to consult physicians for various supposed diseases, which are the immediate results of their preposterous attempts to make themselves "fine figures." Many of them, with this view, keep on their corsets and busks all night, *tightening*, when they lie down, instead of loosening them, and again in the morning drawing them still closer,—considering every successive half inch in the compression and diminution of the lower part of the chest, as so much "clear

gain."* The consequences that speedily follow are, loss of appetite, headach, palpitation, and most of the sufferings already mentioned.

After all our researches, we have not been able to discover the exact origin of this ridiculous and injurious mode of dressing. That in one modification or other it has been employed among Europeans for ages, we have unquestionable proof. The circumstance of its being confined principally to those countries whose moral and religious codes have a common foundation, forces us to conclude that the contrivances of stays, corsets, &c. were designed to *conceal*, as far as possible, the consequences of levity and imprudence. The idea of improving the figure by their use, was originally a mere excuse to cover the *real* object for which they were worn. The disposition to imitate, so common to the human race, favoured the views of the depraved and designing, and multitudes of elegant and innocent women fell into a fashion which promised improvement to their personal charms, while in reality it was productive of their destruction. The same phantom of augmenting attractiveness by their employment, contributed to prolong the illusion to the present time, and as our fashionable females have felt the influence produced on their mothers by this folly, we have now the superadded excuse of need of support, on account of muscular debility, urged for its continuance. It is not a little curious to observe the effect that has been produced on female sentiments, by the operation of this cause. The object being to look slender (graceful is utterly impossible, if the body thus dressed be in motion), all rotundity of person is regarded as vulgar or inelegant, though nature has taken infinite pains to render all living forms round and swelling, both externally and internally. Hence the youthful and unmarried are exceeding desirous, by aid of cord and busk, to look *flat*, and in every sense of the term are successful;—the same horror of rotundity follows them through life, and nothing is so common as to find those who have lived and dressed with an exclusive view to gain husbands, with all the mawkishness of false delicacy, using injurious efforts to conceal their approach to the endearments and respectability of maternity. Far be it from our thoughts to wish that our matrons should, in the slightest degree, abate of their sensitiveness on this or any other subject connected with purity of mind; but a close and somewhat protracted observation has fully convinced us, that, from the cause we have mentioned, and others we dare not speak of, an excess of false delicacy under such circumstances has become fashionable. If all

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* Not long since, the following scene occurred under our notice, at a boarding-house in Philadelphia.—The girl of the house, a tall, good-looking young woman, at the proper time in the after-noon, filled the tea-kettle, and brought it to the kitchen hearth, where she placed it on a bench. To place it over the fire required considerable stooping, and this as it turned out, was impossible to her. Repeated and fruitless were her attempts, by a sort of crouching attitude, to accomplish her object; there was no one present to assist or to relieve her from the restraint which prevented stooping, and at length in despair she gave up her trials, and stood by the kettle as if debating what she should do. The mistress came to inquire if the water was boiling, and found it not yet on the fire!—To her utter astonishment, "the *young lady*" confessed that she had her "*long busk*" on,—that her "*lacing*," which was excessively tight, was in a "hard knot," and that she "could not possibly stoop" to put on the kettle! On another occasion, the writer was obliged to stop and admire one of those faithful imitators of high life, who, attired in a rich yellow barege frock, with gorgeous balloon sleeves, and *laced* to a most fashionable degree, was occupied in sweeping out one of the filthiest gutters in Seventh Street! Nothing was wanting to complete the picture, but one of the exquisitely dressed and Russian belted "gemmen," we occasionally see in the streets, to have shaded her with an umbrella, while she was engaged in discharging this receptacle of "liquid sweets."

the rest of the world were to resolve on the use of tight lacing, mothers should determine to lay it aside, if only in compassion to their offspring, whose health and happiness may otherwise be entirely sacrificed. If we make strict examination among children of *fashionable* parents, we shall find proof sufficient of this, even if nothing worse be discovered than pale, delicate, rickety, or scrofulous subjects, whose appearance proclaims imperfect health with enfeebled and easily injured constitutions. The injuries produced on many delicate females by tight lacing, before and after marriage, have been sufficiently great, in numerous instances, to destroy all the joyous hopes and anticipations which are incident to maternity, and rendered the conjugal condition one of unceasing disappointment and gloomy solitude.

Enough, however, has been said on this subject, although we have given but an imperfect catalogue of the mischiefs produced by tight lacing. Much of what we have said will be regarded by tight lacers as a mere attempt to alarm, because they have not yet especially suffered from this cause. If inquiry be made of physicians residing in our cities, ample confirmation of all we have stated may be obtained, and proofs of still greater evils from this cause afforded. We cannot, however, hope to effect much against the preponderating influence of fashion, considering how often it has been attempted by others unsuccessfully. Nevertheless, we have esteemed it a duty to make even this imperfect essay, hoping that possibly *one* parent might be convinced, or one female saved from injury."*

XXXVI.

Mr. Jewel on Nitrate of Silver in Leucorrhœa.

In the Medical and Physical Journal for last October, Mr. Jewel drew the attention of his brethren to the subject of vaginal discharges, and more especially to a remedy not hitherto prescribed in such cases—injections of nitrate of silver. It is Mr. Jewel's opinion that a very common cause of leucorrhœa is a subacute or chronic inflammation of the cervix uteri—and that this phlogosis is not seldom mistaken for more serious affections, as carcinoma uteri. He thinks that the irritable uterus, so ably described by Dr. Gooch, will be remedied by the same plan of treatment which he prescribes for leucorrhœa. The following remarks, he hopes, will assist the young practitioner in his diagnosis of leucorrhœal from more serious diseases of the uterine system.

"This inflammation of the cervix uteri, like scirrhus, or other organic disease of the uterine system, attacks occasionally at the period of life when the catamenia are about to cease; but I have more frequently found it to exist in married women, from the age of twenty-six or twenty-seven to that of forty, and very recently I have seen several severe cases occurring in young married females, within three months after the birth of the first child. The local symptoms in both diseases are very nearly allied, namely, occasional lancinating pain, more or less acute, through the region of the uterus; with a constant dull kind of pain about the inferior portion of the sacrum, the hip, or groin; attended also by an irritable bladder, or frequent desire to void the urine, and in some severer cases by tenesmus. The vaginal discharge is of a milky or cream-like colour, and is commonly, but particularly in the more acute cases, mixed with dark-coloured or grumous secretion. Upon making an examination per vaginam in this disease, the os uteri will not be found opened to the same extent as in carcinoma, nor will its margin present the same cartilaginous hardness to the touch. The pain does not appear to be situated in the edges of the os uteri, as described by Mr. Burns, but in the cervix, as pressure upon this part alone, occasions the patient to complain. The uterus will be found projecting lower in the vagina than natural; but this will depend upon the

* Boston Med. and Surg. Journal.

nature of the complaint: the more acute, the farther it will have descended."

Passing over the routine remedies in such cases, Mr. Jewel adverts to the use of nitrate of silver applied directly to the part affected. The mode of application which he has employed is, either to conceal the caustic in a silver tube, precisely on the principle of its application in strictures, or to use a solution of the nitrate, in the proportion of three grains to the ounce of water, gradually increasing the strength. A bit of sponge, firmly and neatly tied to a piece of whalebone, is to be moisted with the solution, and carefully introduced into the vagina up to the os uteri. This mode, he conceives, is preferable to injection, and can be effected by the patient herself. The application should be frequently made. Cases are detailed in illustration, and he concludes his paper by guarding the profession against the idea that he holds up the remedy in the light of a specific. He merely recommends it to their attention as a powerful auxiliary to such other means as the nature of the symptoms may indicate.

In the Westminster Medical Society, held January 23d of the present year, our author again drew the attention of his professional brethren to this subject, and the proceedings of the Society are well reported in the Medical Gazette, of January 30th. In this sitting Mr. Jewel reiterated his opinion respecting the pathology of leucorrhœa, and maintained that it was of an inflammatory, or, at all events, a congestive character. But he queries whether such a condition may not lead to scirrhus or carcinoma uteri. After alluding to constitutional treatment, and especially to iodine, which exerts a powerful influence on the uterine system, Mr. J. reiterated his former experience of the nitrate of silver, and adduced the result of additional observation. This subsequent experience appears to have been confirmative of that which proceeded.

From what we have seen of the utility of of nitrate of silver in mucous and mucopurulent discharges from other parts of the body—as the urethra of the male, the eye, &c. we have no doubt that it will prove very useful in leucorrhœa, to which disease, we believe, it has not been applied before Mr. Jewel's remarks appeared.

XXXVII.

DINNER OF THE GENERAL PRACTITIONERS.

We learn that a considerable number of the general practitioners of this metropolis mean to celebrate the late decision of Lord Tenterden, by a public dinner early in March. We, who are their friends, recommend to them TEMPERANCE—not as regards turtle soup or the Tuscan grape—but as regards the expression of their sentiments and the adoption of their resolutions. They meet for a public good—one that may be equally beneficial to the community at large, and to themselves, as a great branch of the medical profession; but, as they will experience more difficulties in attaining their object than they are yet aware of, prudence as well as good taste ought to restrain them from exuberant exultation, and, above all, from the remotest approximation to the introduction of medical politics or party feelings. The subject which draws them together, and which will naturally excite opinions or even discussions, has no necessary connexion with medical politics, and whoever introduces topics that can, in the slightest degree, excite the jealousy, or hurt the feelings of any other branch of the profession, is no friend to the object in pursuit, and will infallibly injure the cause in which they are embarked. The profession has been too long torn by dissensions that tend to lower it in the eyes of the world at large—and such a meeting as that in question, should endeavour to heal the wounds of medical society, rather than open them out afresh. It is only by UNANIMITY that that the general practitioners can hope to attain the object of their solicitude—but

that unanimity among themselves will be best cemented by friendly feelings to their brethren of every description.

They will be wise not to aim at too much in the outset. No great and lasting reformation, in our profession, or in any other, was ever effected PER SALTUM. There is a natural reaction against all sudden and violent revulsions or innovations in society—and no unanimity can be expected under such circumstances. We have heard that it is proposed that the general practitioners should relinquish pharmacy in toto, and practise merely by prescription and fees. We have very little doubt that the rapidly enlarging scale of medical education will ultimately bring the practice into this line; but we humbly suggest that an intermediate step would be most prudent, in the first instance:—namely a reduction of the quantum of medicines dispensed, and an equivalent in charges for attendance.* There is nothing to prevent the adoption of this plan, except want of unanimity. There is no law necessary in the case, nor will the public be long averse to this procedure, after the beneficial influence of it is fully and calmly explained to them by an energetic but dispassionate address from the general practitioners themselves. This address should be carefully and cautiously drawn up, and it should be widely circulated through the medium of the public press. The framing of this address, indeed, appears to be the very first step they should take; and a subscription ought to be immediately raised for defraying the expenses of it. Meetings of the practitioners themselves should be held in all the towns of the empire, and resolutions entered into to support the principle of the address.

Once more we conjure the practitioners who meet at dinner on this occasion to avoid intemperate sallies of feeling, and all appearance of exultation respecting the recent decision in their favour. The public is a capricious and inconsistent, as well as inconstant monster which is readily excited—easily led astray—and managed with great difficulty, not to say DANGER. A convivial meeting is a bad *legislative* assembly:—and sentiments may be broached by well meaning but wrong-headed individuals, under the influence of ardent feelings, which may do more injury to the cause for which they are congregated than they may imagine. If any unwise exultation be displayed on this occasion, it is not improbable that the public may take alarm, and construe the celebration of an event, in reality beneficial to themselves, into a victory gained over them by the general practitioners.* These cautious considerations will be looked upon by the young and sanguine, no doubt, as the timid fears of grey hairs; but the whole history of man-

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* There is a large class of people now, and there ever will be one, who are unable to pay for more than even a small quantity of medicine. What would become of these, were the general practitioner to give up entirely the dispensing of medicine? They would be thrown into the hands of chemists and druggists! This is a class which, though yielding little profit individually to the medical practitioner, return a considerable annual income in the aggregate. It is generally among this class, too, that the reputation of the young practitioner is foundationed, and his future fame and fortune secured. It will not be prudent to leave such a class only the alternatives of physicking themselves or going to a dispensary.

* Nothing could be more injudicious than the wording of the advertisement for this dinner. A "victory"—a "triumph!" This augurs ill—and we venture to predict, that if the men who penned such imprudent notices bear sway at the dinner, the whole will end, as did the meetings at the Freemasons' Tavern, in destruction to the object in view. Let the company only assume the appearance of a party, and there is an end of the affair. Every respectable practitioner will wash his hands of the procedure.

kind teaches us, that the more meekly we bear our triumphs the more solid will be our victories.

XXXVIII.

COLLEGE OF PHYSICIANS.

The evening meetings of this splendid edifice opened with unusual éclat on Monday night, the 8th of February. The Prime Minister and the Lord Chancellor sat on the left and right of the President, and a constellation of rank and talent crowded the spacious library, and even the galleries. Sir Henry Halford read, or rather spoke, a paper with his usual eloquence, and from his well known store of classical and medical erudition. It was admirably adapted for the mixed audience to which it was addressed, being chiefly on the prophetic power attributed by many philosophers and poets of antiquity to the last moments of existence. That many people approach the very goal of human life —the portals of another state of being, or, if the materialists will have it so, the verge of annihilation, with a perfect integrity of their intellectual functions, is well known to medical practitioners. This happens more particularly when the brain is not the principal seat of the disease. For our own parts, we have never seen a single instance where the functions of that important organ resumed any thing like tranquility or clearness, when the disorganization of its material structure was the cause of death. The varied and extensive practice, however, of Sir H. Halford has afforded him the opportunity of observing this rare phenomenon. The following is an outline of the case which was offered by the talented President as an illustration.

"A young gentleman who had been using mercury caught cold while under its influence, and became affected with fever. On the seventh day, when Sir Henry was first called in, he was in a state of the highest excitement—threatening those around him, and not to be approached without increasing his irritation to fury. He was put under restraint, and tartarized antimony administered at intervals, in doses of a grain each time. On the eleventh day from the commencement of the attack, he had become quite calm, and to those about him he seemed to be much better. It was observed that he had repeatedly said he should die, and had talked with the utmost composure of his affairs, giving directions for their arrangement. He sent messages to his absent friends, and spoke of a sister recently dead, as one whom he was about immediately to follow. In answer to his interrogations, Sir Henry found that he had not slept anterior to this quietude, and that his pulse was quicker than ever. He then became satisfied that the improvement was but in appearance—that it was "a lightning before death"—and that the hours of his patient were numbered. He died that night."*

As no dissection is given of this case, it is by no means certain that the cause of death was in the brain, though its function was so dreadfully disturbed during the course of the disease. The description of the KAUSOS, by Aretæus, was commented on by the President in elegant and eloquent terms, and it is hardly necessary to state, that the prophetic power attributed to the patient by the ancient Greek physician was not credited by the moderns. Numerous and very interesting quotations were made from poets, in later as well as earlier periods where the belief of dying inspiration was alluded to, rather, however, as poetical licences than as philosophical deductions. We are glad to perceive, that the Bishops and other non-professional visitors who were present considered the learned President's paper, as supporting the doctrine of the immortality of the soul and the fundamental tenets of our holy religion—thus tending to wipe off the stain of scepticism, so long attached to medical philosophy.

For our own parts, we are almost ashamed

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* See Medical Gazette, Feb. 13th, 1830.

to say, that this first SOIREE of the College led to a train of reflexions much less celestial than the President's paper was calculated to inspire. Sir Henry Halford is possessed of an influence capable of effecting a work of great benefit to the profession and honour to himself. By his personal influence the Charter of the College might be enlarged, remodelled and placed upon a basis corresponding with the present state of Europe—a basis that would extend and augment its power, by an accession of talent and learning from what may be called the democracy of the profession, but which would make it the first scientific institution in the world. Has the constitution of England been weakened by an admixture of aristocracy and democracy? What would the House of Lords be, without that of the Commons? Why should not the LICENTIATES of the College have some tie or connexion with it, beyond the mere *permit* to carry on the practice of their calling? The eagle-eyed President cannot be unaware that the immense body of Licentiates labour under the same disabilities as the Catholics lately did—that they must consider themselves as degraded outcasts from the College—and can never, under such circumstances, cordially unite in supporting its splendour or respectability. The annual, biennial, or triennial election of dying talent, or of a Court favourite, is a sorry boon to merit, which sycophants may extol, but which the independent mind can never commend. The enlightened President knows this, as well as he knows that the sun rises in the east and sets in the west. But he is fettered, not so much by aristocratical prejudices, as by aristocratical associates. The fleeting moment is rapidly passing away, in which he might lay the foundation of an edifice that would associate the name of Halford, with that of Harvey and Hunter, to the latest records of posterity! That moment past, the golden opportunity will vanish; and future generations may peradventure, quote these lines, when the place where the dust of the President and Prophet is interred, shall be totally forgotten.

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XXXIX.

HOPITAL SAINT LOUIS.

I. CÆSARIAN OPERATION ON A PATIENT DEAD FROM HÆMOPTYSIS.*

The following is a curious instance of the Cæsarian operation saving the life of the child some minutes after the death of the mother. We question much whether a similar step would have been resorted to in this country, save and except by those few choice spirits who possess a true German relish for gastrotomy.

Case. Eliza Doviller, æt. 28, entered the Hôpital St. Louis on the 2d of June, 1829, with the usual symptoms of phthisis pulmonalis; cough, blood-streaked expectoration, sharp pains in the chest, hectic fever, emaciation. The resonance of the chest was increased below the clavicles, a circumstance due, as the intelligent reporter remarks, partly to the emaciation of the subject and partly to tuberculous excavations; the hand applied in these regions had a *fremissement* communicated to it by the voice; the natural respiration gave way in these situations to *gargouillement* and pectoriloquy; and finally the breathing elsewhere was more sonorous than usual; auscultic symptoms that indicated, but too unerringly, the mischief in the pulmonary texture. Besides this mortal disease the unfortunate patient was eight months and a half gone in pregnancy.

On investigating her history it appeared that she had always led a very irregular life; that four years before her admission she was

* Journal Hebdomadaire. No. 59.

seized with bronchitis, which in spite of the measures had recourse to passed into a chronic state; that continuing her excesses the cough grew daily worse, and became accompanied with pains in the chest, expectoration and emaciation; and that finally, in spite of the earnest advice of her physician she left her situation of femme-de-chambre to live with her paramour. Soon after this step the menses ceased to flow, and the usual symptoms of pregnancy appeared. At first this change gave a marked relief to the thoracic complaint, but as soon as the uterus acquired any magnitude the pains in the chest and suffocation returned, she began to spit blood, and her weakness rapidly increased.

We need not particularize the treatment pursued in the hospital, suffice it to say that on the 14th, the weather being hot and oppressive at the time, she suffered much from suffocation and spat more blood than usual. A small bleeding was had recourse to and procured some relief, but at 7 P. M. of the 17th she was suddenly seized with a frightful hæmoptysis, and expired in the space of four minutes, with the blood gushing from the mouth and nostrils.

When the interne, M. Huguier, arrived, life was quite extinct, and he instantly determined to lay open the uterus and save the life of the child if possible. The corpse being placed with the head and chest raised by pillows and the thighs flexed upon the pelvis, an assistant retained the uterus in the middle of the abdomen. The integuments then being put upon the stretch by the left hand applied below the umbilicus, a vertical incision was made with a convex bistoury along the median line, commencing at an inch below the umbilicus and terminating at an inch and a half or two inches from the pubes. The skin, cellular tissue, linea alba, and peritoneum were all cut through, with a vast deal of superfluous caution considering that the patient was a dead one, and at length the anterior and superior portion of the uterus was incised "layer by layer," till the membranes were exposed, punctured, and the liquor amnii evacuated. The fore and middle fingers of the left hand were introduced into the opening and the latter enlarged by tearing the membranes, when the whole hand was got into the cavity of the womb, and the sides of the incision separated, by the fingers being held wide apart at its superior angle.

The feet of the child were now sought for with the right hand and quickly found, when both hands were withdrawn and employed to extract the infant which scarcely gave any signs of life. It was pale, exsanguined, motionless, and the pulsations of the heart were scarcely perceptible. The cord was tied before it was cut, frictions with warm cloths on the præcordia were had recourse to, artificial respiration set up, and the child placed in the warm bath. Under the employment of these measures the heart began to beat more vigorously, the nisus of respiration was induced, and the infant uttered that feeble cry which heralds our entrance into a stormy existence. The animal heat could only be retained by keeping the little creature in warm cloths, but at the age of thirty days, when the report closes, it enjoyed good health.

No dissection of the unfortunate mother was permitted by the friends, but that does not matter very much, as the rescue of the offspring by the Cæsarian section is the important portion of the case. Whether an existence so procured will be one of happiness or misery to the infant, whether it bears in its organization the germs of its future destruction by scrofula or phthisis, or whether it does not, it must at least be allowed that no case can possibly arise, in which the Cæsarian operation can inflict a less amount of suffering, in proportion to its good, than it has done in the present instance. The knife of the surgeon or the anatomist "wrings not the tethers" of the dead!

II. SEVERE SYMPTOMS AFTER OPENING A BODY.*

The interne of this hospital, M. T—,

* Journ. Hebd. No. 56.

examined the body of a woman who died of puerperal fever, having at the time a small abrasion on the extremity of one of his fingers. On the day of the dissection, about noon, he felt a very severe pain in the part, which was red and swollen, and in two hours afterwards the glands in the axilla swelled and grew painful likewise; at the same time several red and tortuous lines appeared on the back of the hand and fore-arm. M. T. now began to experience malaise, head-ach, a sense of heat in the throat, and some shiverings. He went out in order to drive away his morbid feelings, but suffered from pains and aches in his limbs and extreme fatigue. At 6, p. m. he experienced thirst with a sensation of burning in the bronchia, œsophagus, and epigastrium; the mouth was dry and clammy. He took some soup and eat a few grapes, shortly after which he was attacked with a violent shivering that lasted three hours, and was accompanied by nausea and syncope. M. T— went to bed and slept for some hours, but in the middle of the night he was seized with fever, agitation, and delirium. At 4, a. m. he sweated profusely and again went to sleep. In the morning a small vesicle was observed at the excoriated part of the finger, at the bottom of which was a little slough, and around it was a tense areola. The red streaks along the hand and fore-arm were no longer seen, but the axillary glands continued swollen, and the pain extended throughout that side of the chest. The general symptoms, which were not so severe, consisted in — head-ache, oppression at the episgastrium and general malaise, pale anxious countenance, small and feeble pulse, foul clammy tongue. The sore was freely cauterised with the nitrate of silver, and some negus of old wine, rendered aromatic by the admixture of cancella, was taken alternately with strong tea throughout the day. Two hours after the commencement of this plan the head-ach and nausea disappeared, a profuse perspiration broke out and continued throughout the day, and in the evening the patient was nearly well. On the third day very little swelling and pain in the axilla remained, the slough made by the nitrate of silver soon separated, and thus M. T— got thoroughly out of a scrape that has proved fatal to too many professional men in Europe and America.

We cannot part from this interesting topic, interesting at least among ourselves, though we fancy that small sympathy is bestowed upon us by the public, without giving what we believe to be an useful caution. From what we have seen we should say that cauterization of these pricks in dissection, whether by the nitric cid, the nitrate of silver, the caustic potass, or any other method, is productic of mischief. Irritation and inflammation are produced if the habit of the individual be indifferent, which it commonly is; a troublesome ill-conditioned sore ensues; and weeks, months, nay even years may elapse before this apparently trifling puncture is fairly healed. Of this we have seen many instances amongst students, and we have before our eyes the case of a young man who applied the nitric acid to a prick on the back of his hand, and suffered for nine months from as foul and irritable a looking sore as one often sees. We should say that in the milder forms of constitutional implication from dissection-wounds, the best plan is to use only poultices or soothing applications to the part, take a brisk purge or two, and support the system by such tonics as a fair allowance of port wine or malt liquor, according to circumstances, with a liberal diet. These means succeeded by a little country air, are far more efficacious in ordinary cases than any others with which we are acquainted. The treatment of those acute and frightfully fatal cases that now and then occur is quite a different matter, a subject in fact on which we have no intention of entering at present.

III. REMARKS BY BARON ALIBERT ON THE LEPROUS AFFECTION TERMED LEUCA BY THE ANCIENTS.*

M. Alibert observes that this affection, *Leuce* or *Leuca*, is very rare in the present age, and appears to have been replaced by

* Révue Medicale. Sept. 1829.

elephantasis. MM. Quoy and Gaimard in their voyage round the world have noticed it in the natives of several countries, and M. Alibert himself has seen a few examples of it. We shall lay before our readers a concise description of the disease, which boasts of more ancient mention in historical documents than any other cutaneous complaint.

It begins by spots, *taches*, of a wholly unusual appearance; they are first of a whitish or ash grey colour, sometimes of a greenish white with a shade of yellow. Though occasionally irregular they are most commonly circular, bordered with an inflamed areola of reddish or rosy tint. These characters are pretty constant in the first stage of the disease, which still preserves the level of the healthy integuments. In the *second* stage, the patches become larger, more brown or black, grow hard, and are depressed; the areola remains but the diseased skin is deprived of its sensibility. In the *third* stage, the patches become of a very firm consistence, almost coriaceous, and the areola disappears. The depression of the skin in the second stage is a specific character and is dwelt on in Leviticus. M. Alibert was consulted by a planter of Louisiana, in whom this complaint had developed itself almost insensibly on the left side of the abdomen. The dry and discoloured integument was marked by white, circular spots, each becoming scaly in its turn by the progressive desiccation of the cuticle. These patches originally of a greyish white hue lost this colour in the course of some months after their appearance, when they grew browner, wrinkled in the centre, and at last exhibited a very visible depression below the level of the surrounding surface. The disease increased rapidly and could not be checked. The eruption is accompanied with scarcely any itching, but is generally preceded by a feeling of weakness in the system, and a kind of langour in the exercise of the functions of the body. When once established, the characters previously enumerated will amply suffice to distinguish this terrible disease, which excited such horror in the ancient world, that both in Asia and Europe lepers were legally dead, and we read that Tamerlane the ferocious Tartar conqueror ordered their utter extermination in all the countries which submitted to his arms. M. Alibert enters with much eloquence into the *history* of this variety of leprosy, but as such a disquisition is rather a matter of curiosity than practical interest we shall waive accompanying the learned Baron. As he makes no mention of the treatment we suppose he knows of none possessed of any efficacy.

XL.

ROYAL INFIRMARY OF GLASGOW.

TUMOURS OF THE FEMALE BREAST.*

The surgeons of the Glasgow Infirmary deserve credit for their zeal in continuing the publication of such interesting cases as occur in the establishment. The present report is from the pen and practice of Mr. Cowan, who, we suppose, has recently succeeded to the office of surgeon, which is only held for a certain length of time by one individual. We shall select, as usual, the most interesting points for our readers' perusal, and none can be more so than the affections of the female breast. The lectures of Sir Astley Cooper have done much, and the splendid work he is now engaged in promises to do more in forwarding our acquaintance with these very important diseases. But to consider more particularly the present cases.

CASE.—*The Irritable Breast.* "A young woman, about twenty years of age, of a strumous habit, admitted with irritable tumour in each breast. The menstrual secretion was irregular, and about the time of its appearance, the breasts became more irritable. Leeches had been applied formerly with little or no benefit. In the treatment of this patient, the only local application made use of was a plaister, composed of soap cerate, and extract of belladonna, and the whole attention was directed to the improvement of the constitution. Plummer's

* Glasgow Journ. No. VIII. Vol. II.

pills, along with decoction of sarsaparilla, were first employed, and laterally the mist. ferri comp. and other tonics. From these remedies, some partial amendment took place, and she was after some weeks sent down to the sea-coast. In such instances we must not be too liberal in the use of leeches, as their frequent repetition increases that irritable state of the constitution on which the existence of the tumour generally depends. The disease generally abates as the patient gets older."

We perfectly agree with Mr. Cowan in his remarks on the foregoing case. Cæteris paribus, the less local treatment employed the better for these irritable, or more properly speaking, hysterical, affections of the breast, or indeed of any other part of the body. They tend to direct the attention of the patient to a subject from which it should be the practitioner's object to wean her, and leeches or cupping-glasses in these cases not unfrequently "make the food they feed on." We remember, some few months ago, having been particularly struck with this fact, in the instance of a young woman labouring under the hysterical affection of the elbow-joint. A surgeon had treated it by caustic issues, and the patient became worse. Another surgeon saw the girl, and prescribed bread pills and aloes and myrrh, but not effecting a cure in the course of a week, or even less, he, too, became alarmed, abandoned his former scent, although the true one, and followed in the wake of his predecessor by again establishing a caustic issue. It was many months before the complaint wore itself out under this treatment, whereas, under the firmer use of antispasmodics, emmenagogues, and tonics, it would probably have been got under in as many weeks. These sentiments are not delivered at random; we speak from experience, and that by no means a narrow one. When the pain is very obstinate or very severe, which it not unfrequently is, we think, on the whole, that blisters answer better than either leeches, cupping, or any other method. At the same time, we always have recourse to these measures with reluctance, for we really think it an unjustifiable thing to disfigure and score the neck, breast, and back of young women, for complaints that in nine cases out of ten, would do equally well, or better, without any local treatment at all. Purgatives are generally of essential service, but they should almost always be combined with aromatics or tonics. However, this is such an interesting subject, that were we once to embark in it, we should far exceed the limits of this article. We, therefore, pass on to the consideration of a much more serious disease—cancer.

"Three cases of cancer were admitted; in one of these, a patient of forty years of age, married, with a family, the complaint was only of seven months' duration, but the whole breast was implicated in the disease; the tumour was ulcerated, and firmly attached to the subjacent parts; the glands in the axilla were enlarged, and the lung seemed diseased, dyspnœa and cough being present. This case being entirely hopeless, the patient was dismissed.

An old woman, nearly seventy, had distinct scirrhous tubercle in the left breast, but this gave her little uneasiness, unless from the mental distress it occasioned. From the slow progress of similar tumours at an advanced period of life, she was advised to dismiss all uneasiness from her mind regarding it, and to allow no application whatever to be made to it. She was dismissed relieved.

The other case was that of a married woman, the mother of several children.

In the left breast is a very hard tumour, occupying more than two-thirds of its substance, and about the size of half an orange. The tumour has an irregular and slightly nodulated surface, and the integuments at its outer margin are retracted and adherent to it. It moves freely over the subjacent parts; is the seat of frequent lancinating pain, which darts through it into the axilla, where several indurated glands are felt, the two largest the size of a hazel nut. Slight cough towards evening. Dyspepsia: pulse 76. Leucorrhœal discharge, but on examination, no disease of the uterus can be detected.

Swelling was first observed four years

ago, and was nearly of the size of a pea. In a year it attained the size of a hazel nut, and became affected with lancinating pains, which have increased in severity with the size of the tumour. Pain first felt in the axilla three weeks ago, and within the last few days, the indurated glands were first observed.

20th March. The mamma, and the indurated axillary glands, were removed in the usual manner; and when examined, the tumour was found to be distinctly scirrhous. The wound was dressed on the 24th, and appeared healthy; the greater number of the ligatures having come away. On the 26th, the remaining ones were detached—the discharge was copious and the lips of the wound were inflamed. She complained of cough and pain in the chest, increased on coughing. She was bled to ʒxij. She rapidly improved: the dyspeptic symptoms yielded to tincture of colomba and quinine. She recovered her strength and flesh, and on the 21st April, a month after the operation, she was dismissed cured."

The subject of the next case was an unmarried female, aged 37. On the date of report, the 3d of December, the following were the symptoms:—On the right side of the chest, extending downwards over the mamma, from the junction of the first rib with the sternum, a deep ulcerated cavity, about five inches in length and three in breadth—edges of the sore everted—base florid and apparently not unhealthy—discharge thin, fetid, and considerable. The superior part of the sternum formed the inner boundary of the sore for upwards of two inches, and the bone at this point seemed projecting forwards. Below this the integuments were swollen and red, the whole mamma was also swollen, firm, and painful upon pressure. A little above the ensiform cartilage was a small foul sore, the size of a sixpence, with everted edges. One of the axillary glands was as large as an orange, and several glands above the clavicle were indurated. She had frequent pain in the sore and the axilla, stretching up to the neck—occasional cough and tendency to dyspnœa—catamenia present every three weeks—general health otherwise tolerable.

A small tumour first appeared four years before the date of report, and increased so slowly, that ten months back it was only the size of a child's fist. It then ulcerated, and subsequently the ulceration progressively increased. Her mouth was made sore with mercury, and a solution of chloride of lime employed to destroy the fœtor of the discharge, whilst the breast was supported and the sore simply dressed. For a week previous to the 22d, very firm pressure by compress and roller was made upon the tumour; but under this treatment matters became worse, and it was, therefore, discontinued. On the 5th of January she was ordered quinine and wine, and this was followed by a favourable change in the appearance of the sore. By a mistake, mercurial pills were now substituted for the quinine, the mouth became affected, and the ulcerated surface very irritable and sloughy. Bloody discharge ensued, then repeated hæmorrhage, the pleuræ were involved in the sloughing and laid bare, and on the first of February the patient died.

Sectio Cadaveris. "The ulcer had extended itself so as to occupy more than the superior two-thirds of the right side of chest; was universally of a dark gray colour and sloughy appearance.

In the axilla, and in the seat of the induration which existed in that quarter, sloughing had taken place to such a depth as to expose the axillary vessels and nerves. The sore thus produced was about two inches distant from that on the breast. Towards the sternal boundary of the latter sore, the pleura was perforated at several points, and the cartilages of all the ribs on the right side but the first were loosened, and some of them completely detached from the sternum.

All along the line of its attachment to the cartilages, and extending some way over its anterior surface, this bone was found rough. In the situation of its junction with the cartilage of the second rib, the upper and middle portions of the sternum were nearly separated from each other, and about an inch and a half of its inferior extremity was carious, and completely detached from the middle portion.

On the left side, the cartilaginous attachments of the 2d, 4th, 5th, 6th, and 7th ribs to the sternum were much loosened. The right lung was partially adherent to the side of the chest, its surface coated with flakes of coagulable lymph, and its substance partially consolidated from recent inflammation. Several ounces of sero-purulent fluid were found in the right side of the chest. On the left were some adhesions, but the lung was healthy. The left mamma was enlarged and indurated, but presented no fibrous bands.

From the patient's age, general health, and the absence of symptoms denoting cancer, but especially from the purulent nature of the discharge, and the very great and decided improvement produced by the tonic mode of treatment, I am convinced that the above case was not one of cancer, and until the lamentable mistake of her taking mercurial for quinine pills, I had every prospect of seeing this large ulcer healed. The disease of the bones found on dissection was not greater than the phagedenic nature of the sore latterly was calculated to produce, and it is barely possible, that had cancerous action been going on in the tumour for years, that the viscera would have been so healthy as on inspection they were found."

We perfectly concur with our author in not considering the above as a case of cancer, but rather as one of unhealthy or phagedænic ulceration, produced perhaps by causes of which both he and we are ignorant. We cannot but lament the substitution of the mercurial for the quinine pills, and yet we are scarcely so sanguine as our author with respect to the ultimate result had no such mistake been committed. We pass on to a case of the hydatid tumour of the breast.

Case. J. C. æt. 60, presents, April 3d, a tumour of large dimensions situated over the left side of the chest, fluctuating below, firm in its upper fourth, and irregular on its surface. It measures round its base two feet one inch; increasing as it proceeds outwards, its greatest circumference is two feet four inches; across its summit in one direction it is one foot five, in another one foot two inches. In the axilla is a gland the size of walnut, and below this an induration felt *as if prolonged from the tumour*, extending up the latissimus dorsi, and moving pretty freely on the subjacent parts. Complains of sharp pains shooting occasionally through the tumour and most severe at its lower part —pulse 76—appetite much fallen off—countenance anxious and sunk—cough with slight and not purulent expectoration — dyspnœa after exertion. A year ago first observed a hard tumour not larger than a pigeon's egg in the mamma. It was unattended by pain, and did not enlarge much for three months when she struck it; a thin discharge from the nipple ensued and continued for the space of three weeks, after which the tumour became affected with sharp pain and increased with more rapidity. The only remedies she has used were frictions with turpentine and spt. camphor.

"On the 9th, a puncture was made with an abscess lancet in the most depending part of the tumour, and about lbs. iv. of fluid, of a dark bloody colour, evacuated. The tumour was then dissected out in the usual way. Besides the large cyst, the contents of which had been evacuated, four others of a smaller size were found; they were all firmly connected together, and to the subjacent parts, by a fibrinous substance, chiefly semi-transparent, and nearly colourless. In the lesser cysts, the fluid was without colour; in the large one, as has been already said, it was bloody, and attached to the walls of this cyst; there was also a quantity of thick soft pasty matter, of a light brown colour, and separable only by maceration. Every diseased part, however, was carefully dissected out. Although no unusual quantity of blood was lost; the incision was necessarily of immense extent, and the patient seemed so exceedingly exhausted, that a general impression prevailed that she would not survive the night. Fifty drops o. laudanum, and ʒii. of brandy, were given immediately after the operation, part of which was vomited. At bed-time she had gr. ii. of opium, and passed a good night."

On the 12th the wound was found adherent, and on the 9th of May the patient was charged with the wound cicatrized, the appetite excellent, and cough trifling.

We suppose this must be considered a tolerably fair specimen of the hydatid tu-

mour of the breast, though it does not tally with the ordinary appearances of that disease in every particular. We are on the whole disposed to think that this "hydatid" disease is not separated from the medullary fungus and scirrhus, by such broad and bold lines of demarcation as is commonly imagined. Certain it is that both in scirrhus and fungus hæmatodes, especially in the latter, we do very frequently find hydatids, or rather cysts filled with dark coloured serum, resembling, apparently in every respect, the larger ones that constitute the peculiar hydatid disease of the breast, or other part. Happily experience, our great instructor, has shewn us that whether it be allied to the more malignant affections or not, the "hydatid" tumour is much less likely to return after operation than they are, in other words that its grade of malignancy is less. This is the cheering and practical point. It is equally surprising and gratifying to find that these large tumours of the breast may be safely removed at a very advanced period of life. The present patient was sixty, and in another case in which we saw the operation successfully performed by Mr. Brodie at St. George's Hospital, the individual was seventy-five years of age. Mr. Brodie, if we remember right, remarked on that occasion that he had removed several such breasts, and the patients had survived for many years afterwards without any return of the disease.

An interesting case of fungus hæmatodes is related, but this we pass over for the present, as we will probably make it the text of a short article at another opportunity.

XLI.

HUNTERIAN ORATION. By Mr. GUTHRIE.

This was the first and the only ORATION which we, or perhaps any of our readers, have ever heard within the walls of the College of Surgeons. A written disquisition has usually been designated by the title of oration—and we do not find fault with such a procedure. We have but few orators among us, and there is probably not another surgeon on the rolls of the College who could have delivered an oration without other notes or memoranda than the flight of time, as indicated by the hand of the silent monitor on the table. The discourse occupied an hour — was delivered in language that might have been, and, indeed, has been committed to the press without the necessity of a single correction—and was spoken with as much ease and fluency, as Mrs. Siddons was wont to read passages from the best English authors. Mr. Guthrie's talent in this way is inimitable, and called forth, without the possibility of repression, repeated bursts of applause. After eulogizing the talents, the genius, and, above all, the INDUSTRY, of John Hunter, the orator recapitulated, in a summary but eloquent manner, the various improvements in operative and medical surgery which have taken place since the death of the illustrious founder of the museum. This procedure, he continued, would prove the most grateful incense which could be offered at the shrine of the illustrious dead—if disembodied spirits were permitted to witness the scenes that occurred on the stage they had quitted. Living and contemporay authors were allotted their just meed of praise—and the names of Abernethy, Cooper, Brodie, Bell, White, Copeland, and Earle, most of whom were present, were honourably and liberably mentioned, in connexion with the improvements which they had introduced into the practice of surgery.

It is asserted by the lying Lancet, that at the mention of Mr. Earle's name, there were marks of disapprobation among the audience! We appeal to each and every individual present, as to the mendacity of this assertion. It is only equalled by the astounding ignorance of Churchwarden Wakley, who has made RUYSCH a famous Dutch LITHOTOMIST!! The fellow knows no more of RAU than he knows of the incarnations of Vishnu.

XLII.

ON DISSECTION-WOUNDS. By WM. LAWRENCE, Esq.

In the notes of Mr. Lawrence's lectures, as published in the Medical Gazette, the following interesting section on wounds received during the dissection of human bodies,

is transferred to our pages because the subject is of great importance—the writer a man of high authority—and the doctrines and practical precepts somewhat doubtful. The document itself shall be fairly laid before our readers, ere we make any comment. We have taken the liberty, however, of marking some passages in Italics, as they will arrest the reader's attention more strongly and render reference more easy.

WOUNDS RECEIVED IN DISSECTION.

"In the division of poisoned wounds I have marked down in the syllabus of these lectures injuries received in dissection?—with a query, a note of interrogation; and I do this in order to express the doubt which I feel in my own mind, whether the effects of such injuries be owing to the introduction into the human frame of poison or not. *It seems to me very doubtful in this case, whether any thing that can be called virulent or poisonous is introduced into the human frame by these occurrences, or whether the effects are to be explained as resulting from such injuries considered mechanically.*

If these be poisoned wounds, they certainly follow other laws from what we observe in those cases of poison that we are intimately acquainted with. If we look at the small-pox, cow-pox, scarlet fever, or syphilis, we see that the application of poison produces pretty regularly certain effects; that they will take place within a certain time, that they exhibit a certain character, and that you can before-hand ascertain pretty clearly, the symptoms and course of such injuries. But we can give no such description of the injuries that arise from dissection;—if they arise, therefore, from poison, it is one of an uncertain, and we might almost say capricious kind. In the first place, in a great majority of instances, no injurious effect is produced from wounds received in dissection;—there are hundreds and hundreds of these wounds occurring without any injurious consequence. It is only in a very small proportion out of the whole number of such wounds, that any prejudicial effects are produced upon the human frame. We can, perhaps, quite as well explain the occurrence of these effects when they take place, by the state of the health of the individual in whom the phenomena occur, as by any peculiar virulent property that may be applied in these cases. Now it has happened to me to meet with cases where wounds have taken place in dissection, and where a person has cut himself hundreds and hundreds of times when he has been in a healthy state of body, who has afterwards died under a like disease. I never experienced any ill effects but once, and then I was in a bad state of health. I had an inflammation in the finger, and subsequently a swelling of the glands in the axilla, with induration. There are a certain number of cases—but very few compared with the whole—in which undoubtedly serious local effects are produced, and in which serious general symptoms occur.

It is, perhaps, rather a question of curiosity than one of direct practical consequence, whether these effects arise from a poisonous matter communicated to the part, or whether they owe their origin to the particular state of the individual at the time the wound is inflicted.

In the first place, we cannot point out any particular state of a subject, or any condition of previous disease, that will certainly give rise to any sort of symptoms in these cases. Indeed we shall see that an individual gets a prick or a cut in the dissection of a certain subject, and suffers serious consequences from it, while others, who have had to do with the same subject suffer no injurious consequences at all. Thus in the majority of instances, the effects produced are such as would seem to arise in wounds considered in themselves, without any reference to the virulent state or decomposition of the bodies in the dissection of which they occur. Inflammation comes on in the part that is the seat of the wound; suppuration may take place; the absorbents may become inflamed, and the absorbent glands, from which these vessels lead, may participate in the inflammation; the cellular substance of the part also becomes the subject of inflammation; and thus, perhaps, it is seen generally, that phlegmonous erysipelas is produced. This condition is a serious one; it is capable in itself, without any suspicion of

poisonous properties in the cause that produced it, to give rise to very serious local, and equally serious general symptoms. Thus a great majority of the cases in which serious symptoms arise, admit of explanation on ordinary principles without the suspicion of any poisonous property in the immediate cause. The question, therefore, respecting the existence of poison, is confined to a few cases, in which some particular local or general symptoms are produced..

With respect to a great number of the ordinary cases, I think there can be no doubt in referring the phenomena they exhibit merely to the effects of the wound, considered as a cause of local inflammation. There was a gentleman, formerly a pupil of this hospital, who wounded his thumb in sewing up a body. *It was the body of a female, who died of some disease in the peritoneum, and I believe he was hardly aware of having injured himself. However, in the course of the night after he received this injury, he experienced very severe pain in the part, (he might have scratched himself slightly, but he felt nothing till night) and became extremely unwell. When he awoke in the morning he sent for a medical friend, who found him in a state of great excitement. He was a robust and hearty person of full habit.* His friend found him with a full, hard, and strong pulse, and with considerable swelling about the part in which the injury had been received—a swelling extending from his hand to the fore-arm generally. He was in a state of extraordinary agitation and restlessness—his nervous system was so much disturbed that he could hardly keep himself quiet. He was in a state, in fact, which called for active depletion; it was adopted, and he lost thirty ounces of blood with considerable relief. He was better the next day, but still the upper extremity generally was swelled. The absorbents leading from the thumb along the fore-arm, and the absorbent glands in the axilla, became inflamed. He had pain in the head, and the nervous symptoms continued to a great degree. He had leeches applied to the head, and cold to the part injured, and purgative medicines were administered. On the following day, all the symptoms were worse; the limb was more swelled; the inflammation of the absorbents and glands was more obvious, and all the symptoms more severe. I saw him on this day; he fancied from the swelling of the ball of the thumb on which the injury was received, that there must be matter, and he wished it to be let out. A deep incision was made, and a little matter did flow out. The hand was enveloped in a warm poultice, and he received considerable relief. Now the incision was deep, and when the limb was enveloped in the poultice, he lost, without being sensible of it, thirty ounces of blood, and seemed better in consequence of this loss. However, the swelling of the fore-arm and upper-arm continued, and rather increased, while the nervous symptoms went on in a greater or less degree. On the following day, in consequence of the continuance of these symptoms, he lost blood twice, and had a quantity of leeches applied to the hand, fore-arm and upper-arm;—indeed he found that was the only way in which the excessive suffering and tension of the inflamed tumefaction could be relieved; so that, without knowing their quantity, he took a handful of leeches, and when they dropped off he put on another—and in the course of twenty-four hours 200 leeches were applied to the upper extremity. By this means the inflammatory action was pretty effectually reduced, and after three or four days of this treatment he found himself exceedingly exhausted. Mr. Gordon was with him, and a remarkable change took place in the symptoms. He became pallid in the countenance, cold in the extremities, the action of the heart was so enfeebled that he appeared as though he were about to die. Under these circumstances, Mr. Gordon gave him opium, which relieved him; he then continued exhibiting opium till the symptoms were removed;—and under the exhibition of the medicine in this way, he gradually recovered. Now in this case we can see nothing more than a local effect, producing high inflammatory action in an individual whose constitutional derangement may have occasioned that disturbance. We see in the treatment depletion, with the loss of a great quantity of blood, locally and generally, and the effect of this in controlling the inflammation. In this case we do not want the ac-

tion of poison to explain the symptoms that occurred in it.

There are other instances in which the general and local disturbances have been different from the above; and it is in them principally that the explanation has been adduced, by which the agency of poison is supposed to be concerned in these cases.

There was a physician in the neighbourhood of London who examined the body of a woman that had died from puerperal peritonitis. At 8 o'clock on the morning of the 28th of December he assisted in sewing up the body, *and he was not aware that he had injured himself.** At 8 o'clock on the evening of the same day, being then dining in company with a friend, he felt a stinging heat and uneasiness at the end of one of his fingers, and he thought he might have wounded himself. On looking at his finger, a slight blush was observed; and when the part was examined, a slight opening was perceived, so that the inference was, that he had injured that part of his finger in sewing up the body. He thought he would try nitrate of silver, and he also put upon it a small quantity of nitric acid, that having been his habit as a matter of precaution. These applications were unattended with pain. He went home, and finding the finger still uneasy, and as the former applications had not given him any pain, he again applied nitrate of silver to the part, continuing the application till he felt it sensibly. The pain thus produced soon increased to a high degree of agony. Shivering came on, and he passed a restless and turbulent night; and when he was seen early in the morning, red lines had formed along the back of the hand. At 8 o'clock on the morning of the 29th, (he had opened the body at 8 o'clock on the 28th of Dec.) an eschar was observed the size of a pea, which was supposed to have occurred from the nitrate of silver. Leeches were directed for him, fomentations, and aperient medicines. About 1 o'clock on the same day, that is, the day after that on which he had opened the body, the finger in question seemed swelled, with a livid appearance; and the pain being very considerable, his medical friend, who saw him, made an incision through the integuments down to the bone, and by so doing he found the last two joints of the finger had mortified. The last and middle phalanx of the finger were already in a state of gangrene;—red lines were formed along the back of the hand and arm up to the elbow, and uneasiness was felt in the axilla. At this time he experienced complete prostration of strength; he felt himself as weak as a child. There was irregularity of his breathing; a sort of torpor about his arm; his pulse from 90 to 100, and soft. During the rest of the day he had much heavy kind of sleep, with intervals of severe pain; the hand and arm swelled, but not very considerably. The absorbents inflamed along the hand, and the axillary glands swelled, and great torpor was experienced, with difficulty of breathing. Swelling took place in the axilla and at the side of the chest, and openings were made in those situations without giving vent to any matter. He died at 6 o'clock on the morning of the 1st of January, which was on the fifth day after opening the body. Now, in this case, there is a remarkable local effect produced; that is, mortification in the part on which the injury had been received—and a serious influence exerted on the animal economy, by which, in four days death is produced in an individual previously healthy.

A gentleman, a few years ago, who was a dresser at this hospital, opened a patient in the course of the day. He was not very exemplary, I believe, as to his mode of living, but indulged in the pleasures of the table; in short, not quite a pattern as to regularity. He got merely a prick on one of his fingers. On the same day that this took place, he had a large party of friends at his house, and he drank very freely. In the course of the night he was awoke by excessive pain in his finger, and before the middle of the following day, the last phalanx of the member had mortified. There was a swelling of that part of the hand and of the limb generally. Inflammation of the absorbents and the absorbent glands took place in this gentleman, with considerable fever. Subsequently, general inflammation of the skin and cellular membrane, that is, phlegmonous erysipelas of the hand and fore-arm, occurred. He was in a state of great danger, but by making a

* Dr. Pett (we should suppose.)

large incision through the inflamed part of the skin and the cellular membrane, he recovered.

Now it must be observed in the first of these two cases, that of the physician who examined the body and died in four days, and in many other of the most serious cases that have occurred, the injuries have been received in the examination of patients who have died from inflammation of the peritoneum, and more particularly from puerperal peritonitis, so that if a poisonous influence is communicated to the body, it would seem to be most generally produced in instances of that kind. Here we have the conflicting result of these two cases. We have the instance of one individual in whom mortification takes place at an early period, as the result of injury, who dies; and another instance in which mortification occurs, and recovery takes place.

Now as to the occurrence of mortification consequent on the wound, I do not deem it to be a sufficient proof of the application of poison. I remember a butcher's boy who was brought to this hospital and placed under my care, who had a hook stuck in his hand, and which tore out its way so as to make a triangular flap on the palm of the hand—a sort of flap that we entertained no doubt would, by keeping it down, unite with the subjacent parts. But the flap mortified, although the injury had been produced merely by an iron hook; so that the mere consequence of a wounded part going into a state of mortification does not prove that poisonous influence is exerted, nor does it appear to me that in this case the general system exhibited the peculiarity that leads us to infer that poisonous influence took place. We merely see in this case that sympathetic influence of the circulating and nervous systems which may be produced by inflammation in a particular state of health, which in one individual will terminate fatally, and in another recovery will take place: so that we have no sufficient ground in any of these cases that poison is communicated to the frame, and from the evidence now before the public, I remain in doubt as to whether there is any poison in the case or not.

I am aware that animal substances in certain states of decomposition, are capable of producing a directly deleterious influence on the human frame. I have already had occasion to mention, in speaking of mortification and diseases of that kind, such disturbances as malignant pustule, where mortification of the surface takes place. This is a kind of effect not so often seen in this country as in some others, where it is observed among the butchers, who have the flaying and cutting-up of animals in a putrid state, which exerts this influence often to a fatal degree. That particular effect is described more minutely by Professor Delpech, in a work, entitled "Treatment of Surgical Diseases." We have not much opportunity of seeing it in this country, but in those instances there is a certain form the disease takes—a particular course which points out the operation of certain and peculiar causes; but we do not see this regularity in those serious occurrences which occasionally arise from dissection.

Now, with respect to the practical rules for the management of these injuries, some persons adopt the plan of touching any wound of this kind with nitrate of silver. I should suppose it is a safe and unobjectionable mode of proceeding, and that in the case of a slight wound or puncture in dissection, there can be no harm in washing the part and touching it with nitrate of silver, which is likely to destroy any injurious influence that might otherwise take place. Some have recommended washing the surface of the wound with oil of turpentine, which might have a similar result. These are means of a preventative kind. If any inflammation should come, then I conceive it would be necessary to keep the wounded part at rest, and to foment or poultice it—that is, to apply a soothing application to it. If there were symptoms of decided inflammation, to take blood from the part by leeches, to take means to evacuate the alimentary canal, and to pursue those measures until the danger should have gone by. If more considerable inflammation should have come on, and if matter should have formed, then I should consider it advisable to open any such collection of matter freely. In those cases where inflammation, swelling, and any thing like the formation of matter should occur, in addition to that in the seat of injury—that is, for example, in cases of a wound of the

finger or hand, where redness and swelling occurs about the axilla or chest, if any thing like the formation of matter should be observed, I think the best course of proceeding would be freely to open the part. The danger in this case is of the inflammation increasing and spreading to the cellular membrane of such parts. When it does so, we know very well that there is a want of tendency to limit the inflammation; that such inflammation is apt to creep on, and affect the surrounding parts to a great extent; that it does not limit itself to one circumference; that it does not tend to come to the surface, and therefore a free incision throughout the affected part is, according to present experience, the most advantageous mode of treating such occurrences.

As to the *constitutional* disturbance that may ensue in conjunction with these local symptoms, generally speaking, it is of an inflammatory character; and it must be treated by antiphlogistic means, according to the extent of the disturbance.

On the whole, I confess I do not regard these cases with any thing like feelings of alarm that some persons do. In a great majority of instances, if a proper degree of attention is paid, they terminate very favourably. I do not conceive that, generally speaking, they are cases that should give rise to alarm, or be looked upon with apprehension. I acknowledge that I am rather inclined to discourage, as much as I can, the idea of a poisonous nature attached to these wounds, because I conceive that the opinion produces much alarm. I do not, however, argue against their poisonous nature from this notion, but I give you my opinion formed from a consideration of the phenomena, independent of any view of that kind. I am, however, certainly glad that I arrive at this conclusion, because I conceive that any other opinion would lead you to prosecute your anatomical studies with greater anxiety.

I should also say that there is not the fear of communicating the peculiar disease to yourselves, in dissections, of which the persons may have died. Although the venereal disease is capable of communicating infection during life, we do not know of its communicating any noxious effect to the body by dissection after death. With respect to cancer, fungus hæmatodes, and all that class of complaints we have no knowledge of any effect communicated to the human body from the dissection of persons laboring under such affections. I mentioned to you, that in my own person I only once experienced any inconvenience from a wound contracted in dissection, and that was in opening the body of a person who had died from cancer of the stomach. Now in that case, it happened that the patient was hardly cold when I wounded my fore-finger in sewing up the body; and a very considerable swelling of the axillary glands came on, with great induration. One of my medical friends made a long face, and I found that he conceived that the glands of the axilla had taken on a scirrhous character, in consequence of the disease in the stomach of the patient I had been examining. He mentioned this idea to another gentleman who was with me, under an injunction not to mention it to me, lest it should alarm me. However, this injunction was not observed, and we had a hearty laugh over it. I had no idea of danger, and there was no ground for apprehension.

I may state, that in examining patients who have died from fungus hæmatodes, scirrhus, or the venereal disease, I do not know of any poisonous principle communicated to wounds received on such occasions. There may, however, perhaps be some exceptions to this general observation. There are some instances recorded, of individuals who have received wounds, either in the examination of animals dying under particular states of disease, or in administering during life to these animals: for instance, to glandered horses. There are instances of individuals who have received wounds upon their hands, under such circumstances, in whom a particular train of symptoms has arisen, one circumstance of which has been the formation of abscesses upon various parts of the body. It has been found that the matter of such an abscess has been capable of communicating to other animals—that is, to horses, or asses, the glanders: and there appears to be a possibility of conveying, from such a wound, the malevolence of the peculiar poisonous principle to the human frame."

We know Mr. Lawrence to be too liberal, and too far above the fear of criticism, to dislike a fair and free examination of his doctrines or precepts. In no other spirit do we approach the subject of this distinguished surgeon's lecture.

It will be observed that the first example which the lecturer adduces is that of a young gentleman—"*a robust and hearty person*"—who received so slight a puncture, while sewing up the body of a female who died of peritoneal disease, that he knew nothing of the matter till he was roused from his sleep by "severe pain in the part." Now, as Mr. Lawrence refers the bad effects of these dissection-wounds to "mere local inflammation," in people out of health, there surely is requisite a considerable stretch of the imagination to catenate the severe symptoms which followed in this case, with an injury which was absolutely undiscovered till the patient awoke in the night, from the severity of the pain! Do we see "robust and hearty persons of full habit" suffer, in this manner, when pricked by needles, or when cut by instruments, in the common avocation of life? certainly not. And is not this a strong indication, nay as good a proof as we can expect in medical matters, that a poisonous principle is instilled into dissection-wounds, which modifies and exasperates their character. In the second instance (which we should suppose was the case of Dr. Pett) the dissection was that of a female who also had died of peritoneal inflammation. The puncture by the needle was so slight that the operator knew nothing of the matter, till, in the middle of dinner, the same evening, his attention was arrested by a stinging heat and uneasiness in the finger. In four or five days he was a corpse! Again we ask, would this have been the case had he pricked his finger while sewing a button on his shirt collar?—we suspect that it would not. The practice grounded on the supposition that these cases are merely instances of local inflammation, and the constitutional symptoms being nothing different from those arising from common wounds, is, in our humble opinion, very dangerous. It leads to a system of active depletion which is rarely successful, and often highly destructive. Our brethren will probably ponder on these things before they adopt such vigorous proceedings. Mr. Lawrence acknowledges, and we entirely agree with him, that these accidents rarely occur unless the general health is in a state of derangement. Is not this the case where people are exposed to many other poisons, as malaria fer example? But even this very circumstance shews that we have to do with constitutions not in a state of vigour, and consequently not capable of bearing vigorous depletion.

XLIII.

INTERMITTENT OPHTHALMIA.

Periodical *pains* are generally soon detected as such, and the patient is spared much effusion of blood; but when symptoms of inflammation accompany the neuralgic affection, the periodicity of the complaint is too often overlooked, or disregarded, and depletory measures are carried to an extent that increases the evil, and protracts its cure. The following case is deserving of record.

A man turned 30 years of age, had been a soldier, but, for some years prior to 1927, had worked in a cotton manufactory. In the Spring of the last mentioned year he became affected with a severe ophthalmia, first of the right, and subsequently of the left eye. This at length subsided; but in three months afterwards, the inflammation re-appeared in the right eye, with a periodicity of eight days:—in the following manner. After being some hours in bed, the patient was awoke by violent pain in the eye, accompanied by lachrymation, redness, and such a sense of distention that he could scarcely be persuaded that the eye was not bursting from the socket. The feeling of sand in the eye was also very distressing. These symptoms would continue during the succeeding day, till towards the evening, when the pains would diminish and ultimately cease, leaving the eye in a state of complete epiphora. On the third day the organ would appear quite sound. Some degree of aversion to light, and lachrymation, however, continued occasionally, during the intermissions, especially in particular states of the weather. These paroxysms returned every eighth day. In the Winter

of 1827, the accessions began to come on in the afternoon, instead of the middle of the night, continuing with great severity till the next morning, and preventing sleep. In the intervals, he carried on his usual labours. On the 8th of April, 1828, he received a blow on the left eye, which instantly deprived him of sight. He did not apply for medical assistance till the 19th of May, when marks of inflammation were visible both in the conjunctiva and sclerotica, with an ulceration on the transparent cornea. The anterior chamber of the eye was very turgid with aqueous humours—the eye prominent, and the pupil drawn obliquely downwards and outwards, when it was remarkably contracted. At this time, he said nothing about the preceding periodical affection of the right eye, and the case was treated as one of traumatic ophthalmia. But the old intermitting affection of the right eye now returned, and with intervals of three instead of eight days. The periodicity at length was so remarkable that proper means were used, and the disease stopped.*

Such cases are more common than are imagined. Within these few weeks we were requested to visit a poor artisan who, in the year 1829, was laid up with a complaint of the above kind for seven or eight weeks, to the almost ruin of his family. The pain was on the left side of the head, and the left eye became every day red and apparently inflamed, with excessive lachrymation and intolerance of light. Repeated depletion and the usual antiphlogistic means did no good, but rather aggravated the complaint, which appeared to have given way to time rather than physic. When we first saw this patient, in the height of a paroxysm, such was the apparent intensity of inflammation in the eye, that we ordered a repetition of leeches to the temple. We soon found out our mistake, and ascertained that the malady came on regularly every morning at six o'clock. The arsenical solution and quinine cut short the complaint in three days, and the man returned to his work, rejoicing that this year's attack was so short, in comparison with that of the preceding year. Many such cases have come under our notice during the last three or four years, and we are convinced that no one would suspect the real nature of the complaint unless he happened to notice the periodicity. The phenomena are exactly those of inflammation, excepting that the pain is more excessive than in common ophthalmia. Yet we really believe that the term inflammation here, is hardly warrantable. It is rather an afflux of blood to the part, occasioned by, and no doubt augmenting the intensity of the nervous pain—the vascular phenomena rapidly subsiding when the neuralgic orgasm is over. The effects of genuine inflammation would not—could not so suddenly disappear.

* Journal Complementaire, Jan. 1830.

XLIV.

CASE OF AN ENORMOUS SWELLING OF THE SCROTUM, WITH SYMPTOMS OF ELEPHANTIASIS.*

Jean Baptiste Authier, married, a tall, dark, well-proportioned man, of a strong bilious constitution, 35 years of age, born at Perpignan, in the Eastern Pyrennees. His father died of an acute affection in his 55th year, and was like himself, of an athletic habit. His mother is also strongly constituted, and now in her 63d year, never having been seriously ill. Authier enjoyed good health until 14 years of age, at which time he entered a regiment of light troops, and followed the French army into Portugal. After four years' service he returned home and pursued his trade of a baker, at which period he caught a gonorrhœa, which yielded to mucilaginous drinks and mercury. At 25 years of age he was admitted into the Gendarmerie à Cheval, two years after which there appeared a slight ulceration on the prepuce; this was immediately treated by caustics, which caused great pain and intense inflammation. Authier obtained permission to return to his family for three months, where he underwent a mercurial course by frictions. At the expiration of the

* From Prof. Delpech's Clinique Chirurgicale de Montpellier.

three months he wished to rejoin his corps although the ulceration was not quite healed; the fatigue of riding soon caused a return of the pain and inflammation; the swelling increased and in the course of two months extended over the whole prepuce. But it became indolent, and the skin infiltrated, hard, tuberculated, and furrowed with deep wrinkles. All the skin of the scrotum, particularly of the lower part, lost its consistency, and became gradually brown, hardened, thickened, tuberculated, and deeply wrinkled. The subjacent cellular tissue was also considerably swelled, feeling first doughy, afterwards consistent, hard and heavy; its weight drew the scrotum down, distending the cutaneous sheath of the penis; and this part of the integuments became inverted in proportion, the penis disappearing and becoming as if sheathed in the tumour. The swelling of the cellular tissue made it difficult to distinguish the tesicles, which became daily more deeply seated. In this state Authier could no longer endure riding; he left the Gendarmerie and returned to his family; and during the following year the tumour rapidly increased, and its lower part became very irregular. During the last three years, the tumour, which was no longer of a doubtful nature, increased much less rapidly than previously. At this time he went into the hospital at Perpignan, where some mercurial preparations were made use of during a short time. He was shortly after sent to Montpellier, where he was admitted into the Hospital St. Eloi, at the commencement of July, 1820. The disease had existed seven years, and his present condition was as follows:—It was evident that the skin of the penis and scrotum, as well as the cellular tissue of the latter part, were affected with elephantiasis; but there was no symptom of the same affection in any other part of the body. The tumour was pyriform, flattened transversely, divided into three lobes at its lower anterior part, and extended below the calf of the leg with a large eminence projecting backwards and held to the perinæum and hypogastric regions by a neck or pedicle, which occupied the whole space between the pubic region, the two groins, and the anus. This neck was 18 inches in circumference at its smallest part; it was larger in front where it covered the two external abdominal rings and the spermatic cord, which could not be distinguished externally; it was less extended posteriorly, where it seemed to be compressed by the buttocks to the size of the perinæum. At the lateral and posterior parts of this neck the skin appeared healthy, supple, and was thin, from the distention it had undergone. On the fore part as far as the pubes, it was much thicker and of such a consistency that, when the patient was laid horizontally, folds could be formed of the skin, in the substance of which the infiltration of the subjacent cellular tissue could be dispersed by pressure of the fingers. No part of the genital organs could be distinguished in this neck. The skin was hard knotty, and adherent at the middle of this mass, not changing at all from pressure: the patient declared that he felt as if his testicles were squeezed when the sides of the tumour were pressed together, at about the distance of one foot from the external abdominal rings. The most dependent part was of a reddish brown colour, divided into three principal lobes, which were covered with knobs formed of the skin, which were more numerous here than elsewhere. Under the anterior portion was a great transverse groove, at the bottom of which was situated a deep sinus leading upwards and slightly to the left; this was the prepuce and urethra, and there was nothing above these like a penis, but the patient assured us that he had occasionally erections and emissions. The entire mass when weighed at Perpignan was estimated at above 60lbs. Walking or standing was very painful, the nutritive functions were not at all disturbed, there were no colicky pains, and the volume of the tumour did not vary with that of the abdomen; the breathing was free without cough or expectoration; the general cutaneous surface, excepting the parts of generation, was not at all changed, but supple, smooth, and perspirable, and of the same temperature as the rest of the body. Yet it was very white, the face having a leaden

tinge, which the patient declared to be his natural appearance. After maturely reflecting on the chances of the patient's being benefitted, the removal of the diseased mass was decided on.

The operation was performed in the following manner. The patient was placed horizontally, exposed to a good light, with the nates on the edge of the bed, and the legs and thighs bent and in a state of abduction. The tumour was held horizontally at its middle circumference, by means of a large cloth, whilst two assistants standing upon the bed, one on each side of the patient, were desired to sustain the tumour and vary its position by means of the girth. We were placed in front of the patient, between his legs, and traced with ink the intended direction of the incisions; each of the two principal ones was to begin near the external abdominal ring, describe in descending a large curve, the sinus of which was turned upwards, pass obliquely over one of the sides of the pedicle of the tumour, and terminate before the anus, at which spot the two incisions were to be united at a tolerably acute angle. The direction of three other incisions was also marked: the first two were curved with the hollow of the curve directed outwards, and commenced on either side under the anterior fifth of the curved lateral incision, and terminated four inches lower down, at a point where a vertical line would have been a tangent to this new curve. The third and last section was traced by a horizontal line which united the inferior extremity of the last two curved incisions. These five incisions were to form three cutaneous flaps. The integuments were divided by means of a convex bistoury, following precisely the lines traced. The two lateral flaps were first dissected as far back as the pubic arch, the fascia lata being laid bare at the base of each of the flaps, because all the cellular tissue the perinæum, and a portion of that at the root of the thigh had been drawn down towards the tumour, and affected to a certain extent in the same manner as the scrotum; the third flap was also dissected down to its base, as far as the pubic arch and the ossa pubis. In the formation of these three flaps we took care to dissect back the skin and cellular tissue that were loose and not infiltrated, which was not practicable with respect to the anterior flap, the dermoid tissue itself being infiltrated with serum. Several ligatures were applied at the base of each flap. Under the fore part of the right lateral flap, and opposite the corresponding abdominal ring, we made an incision into the cellular tissue, which we continued downwards in the direction of the axis of the ring. At the depth of two inches we met with the external pudic vessels, which we divided and tied at the groin. On the opposite side we did the same, and at a still greater depth we found the spermatic cord and vessels; the cremaster appeared thicker, redder, and more distended than usual. We were now at a depth of about four inches in the substance of the tumour, following a diagonal line extending from the left groin towards the right nates; there was a remarkable difference between the dense, lardaceous, partly fibrous tissue of which it was composed, and the loose transparent permeable cellular tissue which immediately enveloped the cord. The spermatic cord was followed by the left finger, which served to conduct the incisions; the testicle was found a little larger than it naturally is, but rather soft, without any effusion into the tunica vaginalis, and more firmly fixed at its posterior extremity to the bottom of the root of cavity which contained it, than the cord at any other part. The patient complained of intolerable pain on pressing the testicle firmly; the left testicle and spermatic cord were detached up to the ring and laid on the abdomen. The right testicle was contained in a larger cavity than the left, easily detached, and laid on the abdomen. The left forefinger was carried into the sinus at the bottom of the tumour by which the urine passed, and which answered to the orifice of the prepuce; it served to guide the incisions which we made from below upwards for the purpose of dividing this sinus, and the sort of cauliflower lobe which covered its orifice, and thus arrive at the glans, which was found at the height of a foot. The whole of the tumour being thus divided on its forepart from the root of the glans up to opposite the symphisis pubis, facilitated the dis-

section, which laid bare the right and left corpus cavernosum. We divided the prepuce round the glans, and dissected up the parts at the posterior part of the penis and urethra, which were only attached to the tumour by loose cellular membrane quite different to the morbid mass; the penis was isolated and placed on the abdomen with the testicles. We now proceeded to the section of the pedicle of the tumour, exposing with ease the different parts of the perinæum; we first discovered the left side of the pubic arch, then the left corpus cavernosum, and successively the canal of the urethra, the bulb, and membranous portion, the erector penis, accelerator urinæ, sphincters of the anus, the right corpus cavernosum, and the right side of the pubic arch, at which part the dissection terminated. On removal of the tumour the artery of the septum of the scrotum, the dorsal arteries of the penis, transverse of perinæum, that of the bulb on either side, and several of the inferior hæmorrhoidal vessels were secured and the ends of the ligatures cut off close to the knots.

The testicles were lodged on the perinæum on either side of the root of the penis. The great length of the spermatic cords necessitated their being placed in zig-zag, in order to confine them in the narrow space between the external abdominal ring and the testicle; it was with difficulty that these parts were kept in situ. The two lateral flaps of integuments were brought together, and maintained so by sutures, as far as the root of the penis, where we omitted the median suture in order to form the sheath of the penis. The anterior flap was rolled round the penis, so that the two sides of the flap which went from the inguinal rings were left free, and the two following were brought together under the whole length of the urethra, and confined at every interval of 8 lines by sutures. The middle portion of this flap, which we may call anterior or inferior, was turned round the extremity of the glans, and represented the free end of the prepuce. The sides of this flap which, between the inguinal ring and the root of the penis on both sides, had been left free, were brought together, each being attached to the anterior fifth of the corresponding lateral flap by sutures, at intervals of 8 lines.

Up to the division of the pedicle of the tumour the operation had lasted 57 minutes. We thought it of importance to relieve the patient's sufferings as soon as possible, and accordingly gave him 60 drops of laudanum in aq. ℥ij. while the sutures were being applied; long narrow pledgets of charpie smeared with cerate covered the parts brought into contact and the sutures; charpie was laid over the new scrotum from the anus to the groins; long compresses, crossed behind and separated in front, covered this mass of charpie; and the whole was confined by a double T bandage applied tolerably tight, in order to prevent any excessive swelling, and to keep in contact the parts which now formed the scrotum, the spermatic cords, the testicles, and the new surface of the perinæum; the groin and penis were but slightly compressed. The weight of the tumour an hour after its extirpation was 54lbs, the quantity of serum that oozed during or after the operation was estimated at 6lbs. Immediately after the operation the pulse was almost insensible, with pale face and cold extremities; sloughing of the flap covering the penis, and suppuration in one or two other parts occurred; but on the whole matters went on so well, that the patient had entirely recovered by the end of November, and left the Hospital in February. Very good advice was given by the surgeon, but as soon as he was at home he committed excesses and irregularities of all kinds, was seized with obscure symptoms, and died on the 23d of February. On dissection an abscess was found in the right lobe of the liver, containing about a pint of pus; nothing further of consequence was observed in the abdomen or chest, nor any thing worth transcribing in the genito-urinary apparatus.

Some interesting remarks on elephantiasis of the scrotum are appended by M. Delpech, but after the article on this disease from Dr. Titley's book, which our readers

will find in the Periscope of the present number; it is unnecessary for us to dwell any further on the subject.

XLV.

M. DUPUYTREN'S TREATMENT OF SPECKS ON THE CORNEA. From Dr. M'Lellan's translation of Ratier's work.

"For some years patients have flocked to the Hôtel-Dieu, afflicted with specks of the cornea, as they formerly resorted to Dessault, for the cure of chronic and scrofulous opthalmia. The treatment pursued by M. Dupuytren is the following:—

"Detraction of blood from the arm, if there be much irritation.

"Leeches to the temple, if the irritation be less considerable.

"One or two mild purgatives at an interval of two or three days.

"After this a seton made of threads of cotton, and of a cylindrical form, introduced at the upper part of the neck, and passing several inches under the skin.

"Lastly, the insufflation of the subjoined powder on the eye, repeated morning and evening, by means of a quill, while the eyelids are kept separated.

"Oxidi Zinci Imp. Præp.
Sacchari Candi Albi
Submuriatis Hydrargyri } *a a* partes æquales.

"The eyes should neither be washed nor rubbed after the insufflation.

"When there does not exist any disease of the eyelids, nor inflammation of the conjunctiva, the insufflation of the powder generally suffices to resolve the specks.

"Those which are recent and slight, are completely dissipated in a few weeks by the insufflations. The specks that have existed longer, that are thicker and broader, usually give way in a month or six weeks, and specks that have occupied almost the whole cornea, covering the pupil, and intercepting entirely the passage of light into the eye, have been frequently seen to disappear completely in the course of a few months."

XLVI.

GIBRALTAR FEVER.

On Monday evening, the 8th March, Dr. Barry read a very interesting paper on the late severe epidemic fever, which carried off more than a thousand souls, out of a population of twenty-one thousand inhabitants and sojourners on the rock of Gibraltar. The following are the prominent features of this communication, as nearly as we could collect.

1. The late Gibraltar epidemic was a fever of *one* paroxysm—cold, hot, sweating. If slight, nothing more—if severe, yellowness about the 3d day—black-vomit, hiccup—total suppression of urine, copious hæmorrhage of black blood from the nose, gums, anus, vagina, and death from 4th to 6th or 7th day, always without fever.

2. Anatomical characters—fawn-coloured mottling of the liver, as if partially boiled—black liquid in the stomach and intestines, whether the patient had vomited black or not—sepulchral yellowness of neck and breast.

3. Gibraltar is certainly one of the cleanest towns in Europe, not even excepting Bath. Well supplied with the best fresh provisions, vegetables, &c. no poor—not a single beggar.

4. The population 21,000 at the commencement of the epidemic, spread over a surface three miles long by more than one quarter broad, besides the bay, the neutral ground, and Catalan bay village. This includes Military and all other classes in the whole territory.

5. No town, nor territory in Europe has been more improved within the last ten years.

6. Nine persons were sick of *some fever*, and two died on board a ship from the Ha-

vannah, on her passage to Gibraltar, in the Summer of 1828. Whilst this ship lay in quarantine, from 27th June to August, *three* more were ill, and one of these was received into the Civil Hospital of Gibraltar on 6th August, as "febris intermittens," but he had no paroxysm after admission.

7. The first two persons taken ill were the son and daughter of a bum-boat man, they had been on board some ship shortly before —one died on 17th the other on 20th August—both yellow, both dark vomiting. The family of the health-guard of this ship was attacked on the 21st August. A servant maid in the Civil Hospital on the 23d August. The one military case was on 2nd September. This man lodged between the two houses first attacked.

8. This disease left upwards of 5000 persons untouched who had passed it before. There is not a *single* authenticated case of second attack in Gibraltar. Of 164 military orderlies in the regimental hospitals, 141 caught the disease. Of 61 civil attendants who volunteered to attend the military sick, (being largely paid,) two only were attacked, and these were the only persons of the 61 who had not passed the disease in some former epidemic. This fact is taken from the official returns of regimental surgeons.

9. Three modes of treatment—1st, mercury with a view to salivate rapidly.—2d. free bleeding—3d. oily, and other mild aperients. The first was by far the *least* successful—the third the most so.

10. Some cases (7) of icterus appeared in 1829, from May to September. Three of these had no fever—four had passed the disease in other years.

No atmospheric or other physical phenomena different from those of the five preceding years were noticed in Gibraltar in 1828.

The impression left on our minds, from hearing the paper read, was, that, if Dr. Barry's statements are correct, (and we do not mean to attach the slightest suspicion to them,) two things out of three are proved—the contagious character of the fever—and the non-liability to second attacks. In respect to the importation of the disease from the other side of the Atlantic, we confess that we see nothing like a proof. Of the local or endemic origin of the fever we have no more doubts than we have of our own existence. But if it turns out to be authenticated, beyond all controversy, that people are not liable a second time to its attacks, that fact alone will be worth all the theories and altercations that have agitated the medical world for the last twenty or thirty years. But the advocates of importation seem not to be aware that this fact (if fully verified) will prove too much; for we believe that no old and experienced practitioner on the other side of the Atlantic will affirm that such non-liability to second attacks is a character of the fever, in the countries whence it is supposed to be imported. Indeed this character must separate it from all fevers hitherto known, excepting the eruptive fevers, and bring it back to its *old* denomination—the "*nova* pestis." We shall say no more till we hear farther from the seat of war. In our next number we shall present our readers with some important particulars respecting the medical topography of Gibraltar, from the pen of the late estimable and talented Dr. Hennen, who gives a different view of the cleanliness of that fortress.

XLVII.

A PRACTICAL FORMULARY OF THE PARISIAN HOSPITALS, &c. &c. By R. D. M'LELLAN, M.D. Duodecimo, pp. 280. Edinburgh and London, 1830.

About a fourth part of this little work is occupied with an account of the various hospitals of Paris—their medical officers—and the prominent features of their practice. The far greater part of the volume is dedicated to a copious account of the various formulæ of medicines, &c. used in the Parisian hospitals, with a copious index, facilitating reference to the whole. The work is translated from the third edition of M. Ratier.

The little volume before us will prove useful to many besides those who visit the Gallic Metropolis, though to the latter it will, of course, prove a peculiarly valuable vade mecum. An analysis is out of the question; but the notice of a single hospital will shew the manner of the translation. We shall select the

HOSPITAL FOR CHILDREN.

This institution is appropriated to the reception of children of both sexes under the age of 16 years, whatever may be the nature of their complaints. Messrs. Jadelot and Guersent are the medical officers, and, in their lectures, make known to their students, the results of their extensive experience. Patients affected with porrigo are placed under the care of two brothers, of the name of Mahon, who are proprietors of a secret remedy, which they have authority to use under the inspection of the physicians, who merely certify the cure. This, in our view of the case, is quackery, on the part of the Messrs. Mahon, although our ingenious and learned friend, Dr. Bailey of Reading, maintains that it is not so. The question might be easily settled thus:—Would Dr. Bailey keep secret a remedy which he knew to be valuable to his fellow creatures, and engross the profits of it to himself? we are quite certain he would not. The following details drawn up by Dr. Delvincourt, and corrected by M. Jadelot himself, furnish a summary of this latter Physician's opinions on a branch of medicine which he appears to practise with modesty, ability, and success.

"Long before the revolution which occurred in medicine relative to essential fevers, M. Jadelot, following the course of his observations, directed specially to the diseases of childhood, had been led to recognise in their affections a more fixed and limited seat. He did not long hesitate in referring a great number of fevers to inflammations, solitary or co-existing, of the abdomen, chest, or head. Those of the abdomen, he next ascertained, were in a proportion infinitely more considerable than those of the other cavities. On the subject of intermittent fevers, the number of which, it may be stated, is now much diminished, M. Jadelot has not formed any particular opinion. He employs the known treatment, modifying it according as he observes, amid the general disorder, any marked alteration of function in the different organs. He thus successfully adopts a mixed treatment, directing for example, antiphlogistic remedies to parts that appear to be the seat of some irritation, and at the same time, exhibiting quinquina alone, or combined with camphor, in the form of enema.

"Almost all that the class of fevers has lost, has been carried to that of the phlegmasiæ; they have been studied with more care, and their treatment, better adapted to their seat and nature, has become less tedious and more fortunate. M. Jadelot was among the first to acquire an accurate knowledge of gastric and intestinal inflammations; he created for himself, so to speak, new methods of recognising them, and arrived, by the inspection of the features of the face alone, at an accuracy of diagnosis truly remarkable. This *semeiology*, peculiar to early life, though we can sometimes derive advantages from it in more advanced years, M. Jadelot has named physiognomonic: in a very few words, a succinct idea of it may be afforded to the reader. Independently of the alterations of colour which the face presents, and which furnish to the physician signs more or less positive, the expression of the physiognomy, and the prominence, more or less considerable, of particular traits, are also means of clearing still farther the diagnosis.

"In the infant, whose facial muscles are not endowed with great mobility, three principal traits present themselves to the observer. They are nearly parallel, and direct themselves from the centre towards the sides of the face; the first, (*oculo-zygomatic,*) proceeding from the great angle of the eye, loses itself a little below the projection formed by the cheek-bone; the second, (*nasal,*) commences at the superior part of the wing of the nose, and prolongs itself, in a semicircle, towards the commissure of the lips; it

is sometimes crossed by a small trait (*genal*) which directs itself towards the middle of the cheek; the last, (*labial*,) arises at the commissure of the lips, and loses itself towards the chin.

"Each of these traits is in relation to one of the visceral cavities. The first is connected with the diseases of the cerebro-nervous system; the second, and its accessory, (the *genal*,) with abdominal lesions; the third, lastly, indicates the affections of the organs of circulation and respiration.

"This mode of investigation, valuable in regard to patients incapable of furnishing any clear information to the physician, requires much experience; but the results obtained from it indemnify the physician for the trouble to which he submits, in order to gain his object.

"In variola, M. Jadelot endeavours particularly to ascertain the different affections, manifest or latent, with which it may be complicated, and on this knowledge he modifies his treatment. Thus, when a violent angina shews itself, without having regard to the period of the eruption, he employs antiphlogistics, and the most powerful derivatives. If symptoms of gastric irritation supervene, he combats them by the appropriate means, assured that the eruption will proceed with more facility in its proper course. In the case of confluent variola, he has recourse to excitants, and even to the internal use of tonics, either administered by the mouth, or in enemata. During the period of suppuration, he recommends to let the pus contained in the pustules flow out, especially when collected in large quantity from the confluence of the pustules, by opening them with the point of a lancet, or by cutting with scissors the top of the pustules, which are afterwards cleansed with a bit of fine linen. During convalescence, he directs the simple or emollient tepid bath, to hasten the fall of the crusts, and facilitate the cutaneous transpiration.

"Rubeola is still more frequently complicated than variola, with inflammation, either of the mucous or parenchymatous structures of the thoracic organs, and this complication merits as much, and even more, care than the original disease. To antiphlogistic measures, M. Jadelot is accustomed to add, as tending to diminish the pulmonary congestion, warm hand baths, (*manilues*,) rendered more stimulating by vinegar, common salt, or the flower of mustard. If the eruption, after having appeared, is suddenly suppressed, which usually happens on inflammation arising in another part of the system, he has recourse to measures proportioned in their activity to the danger which threatens the patient. If the eruption, notwithstanding, be slow in re-appearing, he employs the vapour bath, or frictions, either dry, or with the addition of stimulating liniments. He does not hesitate to prescribe both tonics and stimulants, when, on account of the weakness of the subject, the eruption does not maintain its proper character and course. He confines convalescents to a pretty severe regimen, and administers purgatives but seldom, and those only of the mildest kind.

"The treatment of scarlatina differs little from that of measles. M. Jadelot recommends us to examine carefully the state of the throat, in order that we may be able to oppose in time the angina gangrenosa, which often comes to complicate the disorder.

"The angina gangrenosa is identical, whether it be preceded by scarlatina, or manifest itself without previous disease. At the commencement of this affection, which is generally inflammatory, M. Jadelot follows a treatment purely antiphlogistic; but when he perceives, in the bottom of the throat, broad whitish spots, accompanied with signs of general debility, he has immediate recourse to sinapisms to the feet, gargles, consisting of a decoction of cinchona, cataplasms of the flour of rice, prepared with the same decoction, and sprinkled with aromatic vinegar at the moment when applied to the throat, enemata of the camphorated decoction of bark, diluent drinks, and fumigations with vinegar, directed towards the bottom of the throat. He favours the action of the bark cataplasms by frictions, made

on the sides of the neck, with liniment of ammonia. Sometimes, though rarely, it is necessary to resort to the internal administration of tonics.

"Inflammation of the mucous membrane of the air passages is a very frequent disease of infancy, and the nearer it is to the larynx, its severity is the more obvious. M. Jadelot is the first who attained, by an attentive examination of the patient, a knowledge of the precise seat of the angina, a circumstance of great importance as to the treatment, which ought to be conducted with more or less activity, according as the larynx or trachea is affected, or rather according to the extent of the inflammation in the lining membrane of the air tube. This treatment consists in the application of leeches to the fore-part of the neck, in sinapisms to the inferior extremities, laxative or purgative enemata, and emetics. He gives the preference, in general, to ipecacuanha in powder or in syrup, and employs it in the case of weak subjects, of a sluggish system, after having abated the inflammation by topical bleeding. He entertains, in such cases, no fear from its frequent repetition, even at short intervals.

"M. Jadelot considers croup as a species of angina of the air passage, offering more violent symptoms, aud having, as its special character, veritable paroxysms, divided by well marked remissions. He admits of different degreess in the disorder with regard to intensity, but without changing his opinion respecting its nature.* Emetics, and the abstraction of blood by leeches, are the remedies chiefly employed in the treatment of croup. An emetic alone has often sufficed to check the disease, especially in weak pale subjects; but in other cases, he insists on the application of leeches,† and encourages the flow of blood, until the child become pale, or the force of the pulse much diminished. If the bleeding be suspended too soon, we run the risk of not arresting the evil, and are obliged, as the troublesome consequence of this, to re-apply the leeches. After the bleeding, an emetic is given, and vomiting kept up at intervals of two or three hours, and this practice is attended with the greatest success, the children finding relief after each act of vomiting.

"When croup has reached the second stage without having been subdued, and the presence of a false membrane is suspected, M. Jadelot again applies leeches. As soon as they have fallen off, he excites vomiting, and in this case he employs, in spoonfuls every ten minutes or quarter of an hour, the portion termed *anti-croupale*, until the effect of vomiting is obtained. He equally insists on the use of derivatives, which act on the skin or intestinal canal; and recommends also to provoke sneezing as a means of dedetaching the false membrane from the trachea.

"As to the question whether, when the disease is very rapid, we should commence by blood-letting or by an emetic, M. Jadelot thinks that we should first bleed if the child be robust, and present symptoms of congestion towards the superior parts; but, on the contrary, that an emetic should precede blood-letting, which can afterwards be prac-

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* "M. Guersent, in his clinical lectures, notices a *false croup*, which is cured without any other means than diet, rest in bed, and demulcent drinks.

† "M. Jadelot has never been deterred by the fear of being unable to stay the flow of blood from the punctures made by the leeches, in a part where the vessels are numerous, and in which compression cannot be exerted. This can always be accomplished with agaric immersed in vinegar, or powdered with alum or colophony, or, finally, by means of the bluestone. In order to apply it suitably, it is necessary to dry the bites, and as soon as there is formed a small blackish crust, to cover it with a small piece of agaric supported by the pressure of the finger for a few minutes. Lastly, cauterization, by means of a small stylet, raised to a white heat, of all the methods is the most sure, and least painful.

tised, when the subject is pale, and when little heat or fever exist.

"The sulphuret of potass is a medicine which he rarely employs in croup, and when the inflammation runs high he regards it as dangerous. The dose varies, but it ought not to exceed half a drachm in the twenty-four hours.

"After numerous observations, M. Jadelot believes he has ground for the opinion, that pertussis consists in an inflammation of the bronchia, associated with a particular lesion of the nerves, which distinguishes it from ordinary catarrhs. In consequence of viewing the disease in this light, the treatment consists in blood-letting, relaxants, exhibited in various forms, employing at the same time derivatives* and narcotics. Besides the internal use of narcotics, their external application to the thorax is also directed, which is done by sprinkling a cataplasm with a drachm or two of pure laudanum, or with a solution of the extract of opium.

"In hydrocephalus acutus, M. Jadelot distinguishes a gastro-intestinal irritation which shews itself at the outset of the disease, and which precedes, more or less, the development of the cerebral symptoms, and to which he opposes topical blood-letting, with emollient applications to the abdomen.—When the head, subsequently, appears to be the principal seat of the affection, he adopts antiphlogistic measures, with an immediate view to the condition of this organ; without losing sight, however, of the abdominal irrritation. He does not apply ice to the head, except in the first stage of the disease, before effusion has formed, and when there exists a violent congestion towards the brain. He advises us not to have recourse to this application till after the necessary local bleeding has been premised, and to employ it while the patient is placed in a tepid bath. Such are the means used in the first stage; but when the symptoms have made known the existence of effusion beneath the cranium, M. Jadelot resorts to external derivatives: he applies a blister to the nape of the neck, and orders frictions of the extremities, with acetic æther, or with volatile and aromatic liniments, mercurial frictions to the shaven head, repeated every three, four, or six hours, after having washed the head in the intervals with some ammoniacal liniment. He administers, at the same time, calomel internally, in the dose of two, three, or four grains, repeated four or five times a-day. Finally, the extreme resource is a very large vesicatory to the head."

Whether M. Ratier or the translator be in fault, we have not time at present to inquire; but we suspect that there are occasional mistakes in the quantities of the medicines prescribed in the formulæ which ought to be carefully re-examined. The two following prescriptions must surely be erroneous.

TONIC MIXTURE OF DUPUYTREN.

℞. Extracti Cinchonæ . . . . . 3ij.
Extracti Opii . . . . . ℥ss!!
Syrupi Cinchonæ Vinosi . . . ℥ijss.
Aquæ Menthæ . . . . . .
Aquæ Canellæ . . . . . āā ℥iv.
Misce.

Thus, in a mixture of eleven ounces, there would be 240 grains of extract of opium!!

The next prescription which we glanced at was the ointment of iodine, in which half an ounce of the hydriodate of potash is ordered to be combined with an ounce and a half of lard. This is infinitely too much, and would immediately irritate the skin when applied in friction.

We do not suppose that these errors are numerous, though they appear somewhat startling. The formulæ should be carefully revised, and a table of errata prefixed to the volume, when it will no doubt prove a very useful publication. We shall notice some detached subjects in other departments of our Periscope.

* "Sinapisms of such strength as only to produce a slight redness, and often renewed. Frictions on the arms and chest with acetic æther. Towards the end of the disease, good effects are obtained from blisters."

XLVIII.

M. Bally on the Therapeutic Effects of Morphine.*

We have reason to know, from observation at the bedside, that morphine is a very powerful and often a very excellent narcotic or sedative agent. But there are cases in which it fails, and there are cases in which it disagrees, so that it becomes an object to discriminate the one and ascertain the other, as far as possible, by clinical experiments. We are induced, on these accounts, to notice a valuable, but prolix, memoir on the effects of morphine, by M. Bally; and although in our hands it will be somewhat shorn of its fair proportions, we believe that the residuary *extractive* will not be entirely inefficacious.

M. Bally calculates, that if, when prepared in the best manner, 16 ounces of the solution of opium furnish 8½ *gros*, the opium ought to contain 38¼ grains per ounce, or about 4 grains per *gros*, which constitutes a little more than one-sixteenth.

Various experiments have been made at the College of Alfort, by M. Dupuy and M. Lassaigne, in order to ascertain how far acetate of morphine may be detected by chemical or other tests in case of poisoning. As this is rather a subject for the chemist than the medical practitioner, we shall content ourselves with mentioning the broad conclusions to which the said experiments lead. First, it is possible, in many instances, to detect, by chemical means, sensible traces of this vegetable poison; secondly, it is always in the viscera where the poison was originally introduced, that such traces of its presence are discovered; thirdly, the matters vomitted in a short time after the reception of the poison into the stomach, are found to contain ponderable quantities of it; fourthly, all efforts to discover it in the blood have been ineffectual. Morphine is usually administered, in combination with acetic acid, in the form of acetate, from the belief that its operation is thus rendered more certain and its activity increased. M. Bally, however, has been led by actual experiments to the conclusion, that this is not the fact, and that the salifiable base, or pure morphia, is equal in every respect to the acetate, and may always be substituted for it. If morphia is given it should be in pills, on account of its insolubility in fluid vehicles, and, indeed, this mode of administration is preferred by our author on several accounts. He thinks it advisable, however, to vary the mode of exhibition occasionally, giving sometimes the acetate or sulphate in solution, sometimes the morphia in pill, and sometimes half a grain or a grain in lavement. M. Bally usually exhibits a quarter of a grain twice daily to men, and about half that quantity to women, augmenting or graduating the dose, according to its effects upon the system. To the consideration of those effects we now proceed. Sometimes a sensation of bitterness is experienced in the mouth, and M. Bally declares this to be a fore-runner of vomiting, unless the exhibition of the remedy is desisted from. A woman, ætatis 50, who was taking five quarters of a grain of the morphine per diem, for rheumatic pains, began to be affected with bitterness in the mouth. She continued the remedy till she arrived at seven quarters of a grain daily, when violent vomiting of green matters supervened, with much anguish and great hardness of the pulse. The medicine was of course abandoned, but much epigastric tenderness remained long afterwards. Given in a dose, varying according to the patient's idiosyncrasy, morphine excites violent and prolonged vomiting. A less quantity suffices with women than with men, but the abrupt exhibition of a grain to the latter will commonly operate in this manner. The nausea or vomiting commonly occur very shortly after the reception of the medicine in the stomach, and our author has seen females, in whom the eighth of a grain given twice a day produced a state of permanent nausea, or distressing vomiting.

Another symptom produced by the mor-

* Mémoires de l'Acad. Roy. de Médecine, tome 1.

phine is the extrication of gas in the stomach, a symptom that is always the prelude of nausea. With respect to its action on the intestinal canal, it must be observed that it generally constipates in the first instance, but frequently copious diarrhœa succeeds, and colicky pains are experienced in the vicinity of the umbilicus. M. Bally thinks the salt is possessed of some vermifuge powers, for in one case ascarides lumbricoides were voided during its exhibition, and in another five worms were thrown up by vomiting.

M. Bally believes that the salts of morphia have no action on the kidneys, but nineteen-twentieths of the patients who take it experience some difficulty in making water, amounting in some to complete retention, a symptom which disappears with the removal of its cause. It is remarkable that females are never affected in this manner, but our author has known two or three complain of a sense of heat in micturition. The colour of the urine is never altered.

Morphine never stimulates the heart nor excites the pulse, the latter being rarely higher than from sixty-five to eighty in the minute, and not unfrequently falling lower during its administration. M. Bally observes that morphine, having little or no effect on the thoracic viscera, seldom or never allays that troublesome symptom, cough. If it seems to do so the amendment is delusive, for a day or two dispels the agreeable deception. We have ourselves observed this circumstance, having seen the morphine fail completely in allaying the cough that remains after acute attacks of pleurisy. Morphia is not at all sudorific, but frequently produces an intolerable pruritus or itching on the skin, unattended by cutaneous redness or inflammation. Sometimes the itching is general, more frequently partial, and, in three cases, it extended to the sexual organs of the female, and especially invaded the penis of the male.

In some subjects, the pruritus was accompanied by an eruption of small conical papillæ, sometimes red, sometimes without any decided colour. These symptoms seldom appear during the first days of the administration of the remedy, and pass away when it is discontinued, or even whilst its exhibition is persisted in.

Although morphine or its salts have no exciting effect on the heart and arteries, M. Bally thinks there can be little doubt that it stimulates the brain, and even favours the occurrence of apoplexy and extravasations of blood within the cranium. In proof of this he cites some curious facts.

Case. Jean Marchand, æt. 60, of apoplectic make and figure, had an attack of the disease in 1809, which ended in hemiplegia of the left side. In 1823, the patient entered the hospital to which M. Bally is attached, being then incapable of supporting himself on the left lower extremity, and suffering from a considerable contraction of the arm; his articulation was indistinct, and his intellectual faculties impaired. After some bleedings, ice was applied to the head, and acetate of morphine exhibited in the dose of a quarter of a grain night and morning. When the patient had arrived at seven quarters of a grain in the day, he was attacked with insomnia, headach and delirium, for which he was immediately bled, and the morphine discontinued. Under these measures the alarming symptoms disappeared, and, by the next day, Marchand was in his usual health. Twelve days after this explosion of bad symptoms, M. Bally determined to make another experiment with the acetate, omitting the application of ice to the head. A quarter of a grain was administered morning and evening, but, on the third day, the pulse became hard, full and frequent, the tongue was dry, and the patient delirious in the night. Two bleedings were practised, after which the delirium became furious, and on the fifth day consciousness was totally lost. The thoracic organs were "embarrassed," expectoration ceased, the tongue was dry and red, the pulse frequent, and the patient uttered cries at intervals. On the 6th day after resuming the morphine, and the third from the commencement of the bad symptoms he died.

Sectio Cadaveris. The skin was not dis-

coloured. Between the arachnoid and pia mater was a pretty fair quantity of clear serous fluid, without any injection of the membranes. In the posterior part of the left hemisphere of the brain was a recent extravasation of blood, which had forced itself into three of the convolutions, and produced considerable ramollissement of the cerebral matter. The left optic thalamus was marked, like old cheese, with several small *foyers*, "which, no doubt, had been the seats of old extravasations of blood." At the posterior and superior part of the right corpus striatum, was a depression large enough to contain a French bean, lined with a fine false membrane, and considered by our author to have been the seat of the old apoplectic extravasation, which produced the hemiplegia of the left side. The arteries of the brain were in a morbid state, and presented many cartilaginous points in their tunics. The stomach was of a remarkably blue colour towards its lesser curvature, but nothing further was observed in the thorax or abdomen.

M. Bally has no doubt whatever that the exhibition of the morphine was the cause of death, by producing the recent extravasation in the brain. In two other cases of hemiplegia and palsy related by our author the morphine exasperated the cerebral symptoms, and was abandoned in consequence. These facts should put physicians on their guard.

Considering a narcotic as something more than merely a medicine producing sleep, morphine is decidedly to be considered as such. In some it produces a state like intoxication, in others vertigo, and in others again sensations like electric shocks. Some patients are affected with strange hallucinations, hearing unreal noises and seeing unreal sights. A very common effect is a dimness of vision, amounting at times to momentary incapability of reading, and from the result of much experience and the observation of numerous cases, M. Bally does not hesitate to say that the slow and successive action of the salts of morphine induces *contraction* of the pupils. But it is a curious fact that as soon as this contraction has passed away the pupils have a tendency to dilatation. Of this fact many examples are cited by M. Bally to which we need only allude. In three cases only has M. Bally witnessed primary dilatation of the pupil, and he enters into a discussion to prove that contraction of the pupils is in general the accompaniment of poisoning by opium. In some cases of deep intoxication we have observed this state of the pupil, and in the instance of a man affected with delirium tremens, who took very large quantities of opium, we noticed the same thing. M. Bally mentions a curious circumstance that occurred to him:—eleven hemiplegiac patients in one ward being given the morphine for some length of time, the pupils in all became contracted; but the plan not producing any good effects they were all put upon strychnine, and very shortly the pupils in all became dilated! Our author, however, is inclined to believe that, when given in the form of enema, morphine has a tendency to dilate the pupils; if combined with a remedy whose effects upon the iris are opposed to its own, the pupil is acted upon by neither.

The effects of morphine in producing sleep are very variable, but generally small doses answer better for this purpose than large ones, and what is singular, the season appears to have a perceptible effect on this property of the drug. It does not always, but it does occasionally excite head-ach, generally preceded by vertigo, and more frequently produced in women than in men.

In the production of sleep and their other effects it would be very difficult to ascertain with any accuracy the relative powers of opium, its extracts, and morphine. If any positive proportion existed, a fifteenth of a grain of morphine *should* be equal to one of crude opium, the latter being to the former as 15 to 1. Those, however, who have exhibited morphine will hardly find its actual powers so great as these speculative numbers imply: indeed M. Bally thinks it probable, that a grain of the aqueous extract of opium is more narcotic than a quarter of a grain of morphine.

M. Bally closes his memoir by alluding to

the endermic method of administering this and other remedies. He has employed it with very great success, for of two men affected with paralysis of the hands one was evidently cured by the application of a grain and a half of strychnine daily to the raw surface produced by a blister; the second recovered the use of one hand and nearly recovered that of the other; and a third paraplegiac patient is beginning to walk. Morphine applied in this manner produces "marvellous effects" on rheumatisms, lumbago, and sciatica; and so far do the powers of this remedy extend, that even the indomitable tetanus has been thought to succumb beneath them. Our author has received the histories of three cases of tetanus so treated with success; one was traumatic, the second produced by strychnine, and the third by a fright. Alas! we fear that tetanus is not yet to bow to a mightier than morphine!

This concludes M. Bally's memoir, and we are bound to declare that it evinces a patient and persevering industry of observation and experiment that redound vastly to his credit as a hospital physician. If our neighbours follow so excellent an example they will soon wipe away the stigma of *expectantism* with which their practice is at present branded, we fear too justly, and will lead the van in the appreciation of the powers of medicines, as they have done for some time in the cultivation of morbid anatomy. En avant, say we, and we shall regard with no jealousy the advance of the Eagle of Gallic Science, even though it flap its wings before what Napoleon tauntingly denominated the Leopard of England.

XLIX.

A TREATISE ON SYPHILIS, &c. By JOHN BACOT, Surgeon to the St. George's and St. James's Dispensary, &c. 8vo. pp. 280. London, 1829.

IT is not from a mean opinion of this volume that we have not hitherto reviewed it fully, or that we now merely content ourselves with a brief notice of it in our Periscope. The fact is, that having been previously published in the form of lectures in our valued contemporary, the Medical Gazette, it does not admit of any formal consideration in this Journal. We are loth, however, to pass over so deserving a work in silence, for we believe that if the precepts contained in it were engrafted in the minds of the younger members of the profession, and if they would but follow the practice recommended, the public eye might be spared the horror of many of those shocking objects, the victims of syphilis and mercury, that at present meet it in our marts and thoroughfares. There is not a disease in the black catalogue of human ills in which judicious practice may accomplish more good, or injudicious practice affect more evil, than in the dreaded and frequently dreadful lues. Not one in a hundred of those unfortunate beings that throng our alm's houses, and are sometimes seen in the mansions of the wealthy; wretches like Shakspeare's octogenarian, sans eyes, sans ears, sans teeth, sans every thing; not one in a hundred, we say, of those miserable creatures would be reduced to so loathsome a pass, did their medical attendant's information direct, or their own prudence allow, the proper measures to be steadily pursued. But this is a subject on which declamation would be idle, and we therefore hasten to give a specimen of the work before us. The subject we shall choose is gonorrhœal rheumatism, on which our author's remarks though brief, are pithy and to the purpose.

"The next affection which I shall mention as a consequence of gonorrhœa is rheumatism; that is pain and swelling of the knees and ankles especially. This is the most usual form which the complaint assumes, though in a few very rare instances the symptoms have been more general, the pain more acute, and the general disturbance of the system more severe. These diseases are scarcely mentioned by any writer upon venereal complaints, at which Swediaur expresses his astonishment; though, in fact,

what he has said upon this subject is very unsatisfactory, and proves that it was but imperfectly known even to him; it has not, however, escaped the penetration of Mr. Brodie. Here, again, we are told that a suppression of the gonorrhœal discharge is the cause of the attack; but in the cases which have fallen under my own observation, this must be understood in a very qualified sense. I think it may be fairly said, that neither the affection of the joints, nor the more general rheumatism, come on until the gonorrhœa is upon the decline; and occasionally it has appeared to have succeeded to a sudden cessation of the discharge, following the use of cubebs or copaiba, in large doses; so that those medicines have not escaped the imputation of having been the remote causes of the attack. The subject is too little understood, and the examples of the disease too unfrequent, to permit me to indulge in theoretical views. All I can with confidence assert is, that an attack of pain, and enlargement of the joints of the knees and ankles, sometimes take place suddenly towards the termination of a gonorrhœa. The subjects of these attacks are usually young men men of strumous habits, of florid complexions, and not particularly robust. There is often much puffiness and tenderness of the ankles, especially towards evening; the skin is not externally red; and the pain is not very much augmented by gentle pressure; the pulse is usually more frequent than in a state of health; the stomach sympathizes also in the attack; the appetite declines, or fails altogether; and now and then it happens that all these symptoms are suddenly relieved by an eruption of papulæ, in clusters; or sometimes by pustules, in very minute patches. When these appear, not only are the pains relieved, but the constitutional symptoms also yield; and the eruption, after some days, sometimes, indeed, not for some weeks, grows paler, and a desquamation succeeds, leaving a slightly discoloured state of the skin, which, however, gradually wears itself out. This is the progress of the symptoms when left to themselves; but medicine can do much to relieve them, and to facilitate and hasten their course. In the first attack of pain and swelling of the joints, rest, and confinement to bed, together with the employment of local or general blood-letting, will be necessary; though the use of the lancet is, think, upon the whole, much to be preferred to the application of leeches; but the bleeding should not be carried to any extent. This should be accompanied with the exhibition of saline antimonial medicines, combined with the compound powder of ipecacuanha, in doses of five or six grains, with an interval of four or five hours between each; or what sometimes answers still better, the vinum colchici, in such doses as will produce some effect upon the stomach and bowels. For this purpose, one drachm of the wine may be given as a single dose, mixed with magnesia and camphorated mixture, and a very sudden remission of the pain is frequently the consequence; or, if preferred, the same remedy may be given in more divided doses, from twenty to twenty-five minims every five or six hours. When, by either or all of these means, the pains are relieved, and the pulse returns to its healthy standard, frictions to the limbs, either of camphoretted spirits, or with the flesh-brush, and the internal use of the compound decoction of sarsaparilla, will tend to restore the tone and vigour of the system. If the joints continue swollen and stiff, the warm salt-water bath may be used three times in the week, and a moderate share of exercise permitted, provided the weather admits of it.

"In those cases where the affection of the joints is succeeded by eruptions of the papular or pustular forms, (sometimes, indeed, they are mingled together in the same individual), in addition to the sarsaparilla, small alterative doses of mercury may be conjoined. Of these the best form is, I believe, the compound calomel pill of the present pharmacopœia. Under its judicious and careful use the eruptions will fade away much more quickly, and the strength and health will be more speedily restored than by the mere vegetable remedy alone. It is not necessary, even in these cases, to carry

the exhibition of mercury to the extent of salivation, though a slight tenderness of the gums is not by any means objectionable. One caution, however, is, I think, absolutely necessary; that is, never to persevere in the use of the mercury if it deranges the bowels, or appears to excite any disturbance in the system, denoted by acceleration of the pulse, restlessness, or disturbed sleep at night. Such is the plan of treatment which I should adopt in these affections; but when we have to encounter the more rare, but at the same time more formidable cases of general rheumatism, the mode of treatment must be assimilated to that which we should practice in cases unconnected with any gonorrhœal origin; that is, bleeding may occasionally be necessary. Antimonials or colchicum, with opium and the warm-bath, will be indicated according to the extent and severity of the symptoms; though in the convalescent state the sea-air and bathing are equally appropriate, and more necessary even than in the former instances.

"Among the medicines most efficacious in removing the chronic stage of this disease, bark and guaicum hold the first rank. The ammoniated tincture of guaicum is, indeed, in these instances, a most invaluable remedy, given in doses of from forty to sixty drops, in combination with the decoction of bark, two or three times in the day."

Mr. Bacot has once or twice found these rheumatic complaints dependent on an irritable state of the urethra, the consequence of long-continued or repeated discharge. Here a painful condition of the feet is often one of the most distressing symptoms. In such cases the cure cannot be expected until, by the employment of bougies, the urethra is restored to its natural state. Mr. Bacot pays a well-merited compliment to Mr. Brodie, for the accuracy of that distinguished surgeon's observations on this disease in his Treatise on Diseases of the Joints. Mr. Brodie, it is well known, thinks very highly of the powers of colchicum. Mr. Bacot agrees with Mr. Brodie in believing that the pains are aggravated by blistering the swollen joints, and he does not therefore recommend the measure.

In two cases Mr. Bacot has witnessed ulcerations of the soft palate, leading to disease of the ossa palati, consecutive on a virulent gonorrhœa, the discharge of which had apparently been cured about two months previously. The first stage of this secondary affection was an inflammatory flush of the whole palatine arch; a small pimple then formed and burst just where the velum pendulum palati begins; this spread rapidly until the ulceration assumed the size of a silver three-pence; and continued there with a sloughy bottom, and without much pain, but indisposed to heal by all the simple means employed for that purpose. The patient was of a very irritable strumous habit, and the first appearance of the disease was accompanied with much fever, which gave way to active purging and antimonials. Sarsaparilla was afterwards freely employed, but it was only when mercury was conjoined that a cure was affected. In one case the course appeared not to have been carried to a sufficient extent; the ulceration broke out afresh; disease of the superior maxillary bone ensued; exfoliation took place; and the patient finally recovered after a long course of mercury.

"These cases are, I conceive, highly interesting, because they are certainly proofs of affections of the throat and spongy bones, directly arising from gonorrhœa, and gonorrhœa only. They are rare, perhaps very rare occurrences, not sufficiently common to cause a revolution in our practice, but sufficiently important to call our attention to any similar affection which we must not reject as syphilitic, and withhold the exhibition of mercury merely because we can only trace gonorrhœa as a primary symptom. We must recollect how much is depending upon our coming to a right decision upon a question of such importance to the comfort and welfare of our patient, and not obstinately refuse a remedy which, judiciously managed, will undoubtedly lead to a successful issue, because the phenomena are not exactly in accordance with our preconceived notions. This is a subject to which my attention has lately been particularly called, and it stands in need of farther elucidation."

As far as the history afforded by a patient goes, we may say that we have on several occasions seen severe ulcerations of the throat succeeding gonorrhœa only. But the mischief of it is, that if the accounts of their complaints delivered by patients are frequently fallacious on other occasions, they are positively deceptive to a degree in venereal maladies. They cannot, or they will not, tell the truth, and the surgeon is but too often obliged to judge for himself, and decide upon a plan in direct opposition to what the "history" would point out. In the cases to which we alluded sarsaparilla was effectual, as it commonly is in these secondary sore throats, the compounds of the venereal and mercurial virus.

Here we must conclude, and we cordially recommend Mr. Bacot's book to those who wish to have a comprehensive view of what is generally known and practised by the best surgeons in respect to syphilis.

L.

MR. M'FADZEN ON WATER-DRESSING IN WOUNDS, ULCERS, DISEASES OF THE SKIN, &c.*

The water doctors are oftentimes a by-word in the mouths of the profane and of those whose potations consist of a more exhilarating beverage, but they will now be supported by water surgeons. Dr. Macartney, of Dublin, taking a hint from Homer in the management of wounds, has revived the old water practice, and, as is usual with new medicines, or with old ones furbished afresh, it is achieving miracles. Far be it from us to hint that this water dressing is a milk and water matter; on the contrary, we bow, as in duty bound, to the majesty of potent facts. Mr. M'Fadzen, then, of Buttevant, in Scotland, having fortunately, met two of Dr. Macartney's pupils, and received intelligence of the worthy Professor's plan, resolved to adopt it in the dispensary of which he has the superintendence. Mr. M'F. is delighted to say, that "his success has considerably exceeded his most sanguine expectations, and he has little doubt that Dr. Macartney has effected, by scientific knowledge and acute observation, a valuable improvement in the art of practical surgery." So be it.

"The principle is to excite an agreeable sensation in the part affected; for if this be present inflammation cannot exist. The parts of which the human body is composed being naturally humid, the application of a fluid such as water, which is of the least irritating nature, affords an agreeable sensation, and prevents the necessity of inflammation, by doing away with the sense of injury sustained by the parts, it being a law in the animal economy that inflammation will not arise after an injury done to a part, unless that part feel sensible of the injury.

"The mode of applying this remedy is exceedingly simple, and fortunately attended with very little trouble. A piece of lint dipped in cold water is to be applied with the soft side to the part, and covered with oiled silk, which should extend considerably beyond the limits of the lint, and retained in its place by a light bandage, or any other means the practitioner may deem proper. Any other substance capable of preventing evaporation, and sufficiently light and pliable, such as very thin Indian rubber, would answer the purpose as well as oiled silk. The dressings should be removed three times a day, or less frequently if the secretions from the part are trifling, for the purpose of wetting the lint as it becomes dry, and freeing it from the secretions of the wound or skin, which would in a short time become irritant; therefore it is not sufficient that the lint should be merely moist, for this moisture may be occasioned by perspiration or other discharge of the part collected under

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* Ed. Med. and Surg. Journ. No. 111.

an impervious substance. Hence the lint must either be occasionally removed, or well-washed in cold water, and in like manner the oiled silk or Indian rubber.

"From what has been stated, it must appear that the good effects of this treatment depend on the production of steam at the temperature of the surface of the body, which, being retained by the impervious silk, subjects the part constantly to an atmosphere of that vapour.

"I hope it will not be considered irrelevant to mention here, that oiled silk is also a valuable substance for applying the emollient poultice, having this advantage over linen or calico, that it retains its moisture and heat, at least the heat of the surface over which it is placed, for a greater length of time. I subjoin a case to illustrate its use in this way, and to which I not only attribute the favourable termination of the case, but even the absorption of pus after fluctuation became evident."

With the foregoing rationale of the water-practice we will not quarrel, although we are very far indeed from agreeing in all the principles or theories advanced. Let us look at the *facts*, the cases, by which the general issue is to be tried.

CASE 1.—*Incised Wound.* A poor girl, æt. 16, presenting herself with contraction of the flexor tendon of the middle finger of the left hand, Mr. M'F. made a longitudinal incision down to the tendon in question, and cut it across. The finger was then straightened with some force, secured by a splint on the back of the hand, and cold water applied to the wound by means of the lint and oiled silk. The wound healed rapidly, and unless minutely examined, no cicatrix is observed.

CASE 2.—*Contused Wound.* M R. æt. 10, had the nail of the great toe of the left foot shattered, and the integuments divided to a considerable extent, in consequence of a large stone falling on it. The parts were brought together and secured by sticking-plaster, and water-dressing applied over it. In a few days the dead and sloughy parts began to separate, and a bread and water poultice was substituted for the water dressing, but as soon as the separation was effected the latter was resumed. In about five weeks after the accident the cicatrization was far advanced, and the nail had considerably advanced in its growth.

Now with every disposition in the world to believe, and with as large a stock of faith as any medical journalist should possess, we really cannot discover any uncommon celerity in the foregoing cases, nor perceive any very miraculous effects from the cold water. We cannot but think, and we say it in all humility, that had any of the usual methods been adopted, the cases would have done just as well as they did under the water dressing of Dr. Macartney. Every body knows that it is usual, after dressing recent wounds, to apply spirit lotions, and it seems to us that the professors of the new light do nothing more than subtract the spirit and apply the water. In fact, the whole business reminds us strongly of the sympathetic powder of Sir Kenelm Digby, the virtues of which were so potent in healing a wound, when rubbed on the lance or the brand that had inflicted it!

> But she has ta'en the broken lance,
> And washed it from the clotted gore,
> And salved the splinter o'er and o'er.

As a refrigerant lotion, or as a harmless application, cold water, applied in the manner directed, is well enough no doubt, but we do question much whether its virtues would go far in the treatment of an obstinate ulcer, or in any case that fairly required a decided remedy. When in London, Dr Macartney paid a visit to St. George's Hospital, and at his suggestion and recommendation, some cases were treated by the water dressing. Sore and sorry we are to say, that its powers did not seem to us to be at all commensurate with the sanguine anticipations of its able patron, and, as the proof of the pudding is said to be in the eating, we may mention that this method is never pursued at present in the hospital. Had it been an elixir vitæ, probably it would not have sunk into so early an oblivion. Before con-

cluding, we beg leave to give Mr. M'Fadzen credit for singleness of purpose, and the greatest fairness in the statement of his facts. If we differ from him in opinion, it is perhaps to be considered as our misfortune, that we cannot see the truth so clearly as he does.

LI.

ON THE DISEASES OF CHILDREN. By Mr. MARLEY.

Mr. Marley, though a young surgeon, appears to be an attentive observer, and a judicious practitioner. It is perhaps to be regretted that he has ushered himself so early on the stage of professional literature. Medical knowledge, like wine, gains by keeping. Gross errors fall to the bottom, and the lighter ones float on the top, so that both may be separated from the purified fluid between. We do not address this remark to the author of the present work in particular, but to our junior brethren generally. It will not be attended to, and therefore we shall not press the subject farther. We shall glance at some of the sections in this volume, by way of offering our readers some specimens of the performance.

PRACTICAL REMARKS ON THE USE OF OPIUM.

"In children labouring under severe abdominal pain from an irritable state of the intestinal canal, we often find an appropriate dose of opium (it will be understood that I mean any of its preparations,) given either in form of draught or enema, produce beneficial and speedy relief. The surface, which was before dry and parched, becomes moist, and is succeeded by a gradual cessation of pain, and probably by a sound and undisturbed sleep. But this picture is sometimes reversed, for instead of being quieted, the child will start up suddenly, screaming out as if frightened, or he will moan during a restless and imperfect slumber. When opiates produce the latter train of symptoms, I have generally observed, that on the occurrence of slight diaphoresis, the patient becomes tranquillized, and a calm and quiet sleep will often follow. The warm bath will be found of great utility by producing slight moisture on the surface, and should therefore be employed with that view.

"The power of opiates, in allaying irritation, is probably no where more marked and efficacious than in excessive evacuations from the bowels. In such cases it is in general best to exhibit it in the form of enema; but even in this form caution should guide us in its use. In one instance I have known an injection, containing a very small quantity of laudanum, produce great cerebral excitement, extreme thirst and vomiting.

"In those cases of excitement arising from nervous irritability, its well-timed use will often prove decisive. After bleeding in inflammation of the bowels, opiates will often be found of great use, and should be exhibited per anum. In colic pains they prove highly efficacious, and should never be neglected."

Mr. M. properly considers opium as contra-indicated in affections of the lungs, where there is dry cough and quick pulse—also in all cases of increased action of the brain or its membranes. The author conceives, that "the lives of many children are annually sacrificed by the indiscriminate and improper use of opiates." He instances some cases where mischief was produced by the exhibition of opium to children, and indeed such instances are by no means rare—especially where quack medicines are employed. In truth there is rarely any necessity for the exhibition of opiates to children, excepting in some severe bowel complaints, and then they should be in the form of Dover's powder, or other medicines that determine to the skin, and alternated with castor oil, or other mild laxative. The diseases of children are almost all of an inflammatory character—and the removal of inflammatory action by proper depletion is the best mode of conquering excitement.

II. LOCAL AND GENERAL BLEEDING.

Under this head Mr. Marley has made some judicious remarks. In all cases of internal inflammation, of a serious character, he advises general bleeding in children—from the arm in visceral phlogosis—from the external jugular, or from the temporal artery in cerebral inflammation. Mr. M. has seldom found any difficulty in opening the jugular vein, however young the child; but in infants under 12 or 15 months, it is often difficult to open the veins of the arm. By immersing the member in warm water, the facility of the operation is increased. When these measures are not adopted, or not deemed advisable, he recommends cupping in preference to leeches. His objections to leeches are urged, we think, too strongly; and the great preference of cupping is not very consistent with the following passage.

"I have known considerable nervous excitement produced in children by cupping (particularly on the chest), and occasionally even in adults. I have likewise known extensive local inflammation produced by this operation, but I have never known it end in suppuration."

We have often seen the blaze of the spirit, the pressure of the glass, and the stroke of the sacrificator occasion a wince in men of strong minds—and we cannot reconcile to our minds this lavish praise and recommendation of cupping in cases of infantile disease. In children, the feelings are every thing, and the reasoning powers nothing. We have seen the application of cupping-glasses induce instant convulsions, and such a prejudice excited against a practitioner in the minds of the parents, that he was never afterwards employed in the same family. The feelings of the community are not to be outraged or trifled with — and especially when we are urging measures that are really not more effectual, though far more unpalatable than others of a milder character. Nothing is more common than to see practitioners, who are deficient of tact and discretion, ordering a poor person who can scarcely procure bread for his family, to give half a guinea to a cupper, when half a dozen of leeches, costing a couple of shillings, would be equally beneficial, and much less formidable.

III. CROUP. So much does Mr. Marley dread this disease, that whenever he meets with a "child labouring under cold, if it be accompanied by a dry hoarse cough, with pain and difficulty of breathing, he very generally has recourse to the measures used for croup"—namely, abstraction of blood from the jugular vein—an emetic—and then a dose of calomel. To this practice in real croup, we do not object; but whether the emetic plan is the most proper for a sharp attack of pulmonic inflammation, we have some doubts.

More than a third of the volume is occupied with the subject of cutaneous diseases, and the execution of the whole is respectable. Mr. Marley's remarks are almost entirely practical, being founded on observations made at the bedside of sickness, rather than drawn from books. This is, perhaps, the best recommendation of the work.

LII.

DUPUYTREN'S TREATMENT OF SCROFULA.

The following note respecting the above celebrated surgeon's method of treatment in scrophulous affections, was communicated by Professor Guilbert to M. Ratier, for the third edition of his work on the Parisian Hospitals, recently translated by Dr. M'Lellan.

"The treatment employed by M. Dupuytren in scrofula differs much from the methods of treatment generally followed, and is the result of observations, anatomical and physiological, on the nature and progress of that disease.

"Whatever be its varieties or its seat, scrofula exhibits three distinct periods in its march. In the first, the disease is in some measure inert, manifesting itself only through the characters proper to the lymphatic constitution, and by an interruption, more or less difficult to perceive, in the action of the

parts affected. In this first period, M. Dupuytren employs all the means afforded by the *hygiene* suited to fortify the constitution, and, by consequence, effect the resolution of the disease. He is careful, moreover, to avoid every thing that might irritate, agitate, or heat, as elixirs, antiscorbutic syrups, and other spirituous medicines, which he believes are calculated to make the disease pass from the inert into the inflammatory state.

"It is especially in the second state of the disease, marked always by excitement, fever, local pains, swelling, and sanguineous exhalations, that he sedulously shuns those stimulating remedies which, from the abuse made of them for many years, have produced more evil than the the disease itself they were professed to ameliorate.

"In this second period of the malady, M. Dupuytren, without regard to its supposed nature, treats it as an inflammatory affection, by bleeding, leeches, and diet, and by so doing has often arrested its progress, and prevented its melancholy consequences, such as caries of the bones, gibbosities, spontaneous luxations, suppuration, and destruction of the organs. If suppuration be established, and its products escape easily by an external outlet, and if the disease have returned to that almost inert state which constitutes its first period, he resumes the use of the means calculated to strengthen the system, but is still careful to reject every thing that would excite or have a tendency to cause insomnia or fever. For the same reason he abstains in the third period of the disease, from the use of vinous, alcholic, or alkaline preparations. As a substitute for such, he prescribes only the purely aqueous preparations of cinchona, gentian, or simarouba; persuaded that they contain all that is really *tonic* in these substances, and are free from the irritating properties, contained both in the base and vehicle of the ordinary remedies. He thus employs the aqueous infusions, and syrups of gentian, cinchona, and simarouba, to which he gives more or less strength, according to the age and sex of the individual, or the seat and character of the affection."

CLINICAL REVIEW.

LIII.

ST. GEORGE'S HOSPITAL.

On the Connexion between Pulmonary Apoplexy and Contraction of the Left Auriculo-Ventricular Opening, with Hipertrophy of the Right Side of the Heart.

It is a curious, and in a pathological point of view, a very interesting fact, that when the left auriculo-ventricular opening of the heart becomes straitened and contracted, in consequence of disease of the mitral valve, pulmonary apoplexy is a frequent result. When a constriction of the channel between the left auricle and ventricle may be considered as commencing or established, a series of actions and changes are induced, which illustrate in a remarkable manner the effects of the vis medicatrix naturæ of Cullen, and the mischief to which that reparative process will give rise if it fail in its sanative object. This is perfectly consistent with what commonly happens in the animal economy, for it is undeniable that the efforts of the physician or surgeon are much less frequently directed to the counteraction of disease per se, than to meeting and combating the injurious excesses and results of that boasted vis medicatrix. Without it, indeed, we could do nothing, for it gives us tangible phenomena to struggle with, and is to us what a fulcrum would be to Archimedes *could* he move the world. Thus,

Dear Nature is the kindest mother still.

But to revert to the contraction of the left auriculo-ventricular opening, or ostium arteriosum as it is sometimes denominated. As soon as this is established to any extent, an additional onus is thrown upon the right ventricle, which it meets, as all muscles do, by an increase of power and bulk. It would be difficult to determine whether the first stage of this enlargement be dilatation of cavity or hypertrophy of parietes, but certainly after a time we meet with both, and the right side of the heart affords an example of what English practitioners vaguely term active enlargement, and is more precisely designated by the French, hypertrophy and dilatation. As long as this augmentation of volume is kept within moderate bounds it is to be looked on as an effort of the vis medicatrix, and contributes to the equalization of the circulation and the safety of the individual. But the constriction and impediment to the passage of the blood through the left side of the heart being constantly on the increase, an incessant call is made upon the muscular power of the right ventricle and its enlargement proceeds pari passu, till at length the time arrives when this of itself becomes a morbid condition, and what was at first a reparative process is doomed at last to be the cause of the destruction of the patient.

It must be remembered, that the capillary system intervening between the circulation of the right and the left side of the heart, is peculiarly delicate in every respect. It consists of the fine and extremely minute ramifications of the pulmonary artery and veins, and is situated in an organ of remarkably porous and very fragile texture, as compared with the grosser and tougher tissues of the trunk and the extremities. And yet this system of vessels and this frail texture of the lungs are to bear the brunt of the morbid increase of power in the right side of the heart, the progress of which we have attempted to describe. Nay, not only is there a hypertrophied right ventricle pumping the blood with unnatural violence into the pulmonary organ, but this is prevented from unloading itself or being unloaded, by the difficulty with which the fluid is propelled through the left auriculo-ventricular channel. The inevitable consequence is, that a perpetual congestion must exist in the lung, its vessels must be always gorged, an unceasing strain must be maintained on the small branches of the pulmonary artery, at length these vessels give way, the blood is extravasated in the texture of the lung, and pulmonary apoplexy is produced.

We know that some have ridiculed the term "apoplexy of the lungs," but provided that the nature of the affection be definitively understood, we need care little for verbal disputes. Words are only of value as expressing things, and if the established mode of nomenclature were reversed, and what is now called a hat were named a brick, and a brick called a hat, we really conceive that it would signify little, provided every one knew what was meant by the expressions. Apoplexy of the lungs, then, implies an extravasation of blood into their texture, which may or may not be attended with hæmoptysis, but is not essentially connected with it. It has been a question, whether the blood be extravasated into the proper cellular tissue of the lung, or into the ultimate terminations of the bronchi, constituting the air-cells. This is a point which we really cannot pretend to determine, our eyes not being microscopes, and even microscopes not furnishing conclusive evidence. We believe, however, that in this, as in the effusion of lymph in peripneumony, constituting hepatization, the deposite is both in the cellular texture and the air-cells; but this is a pure speculation, and may be taken for as much as it is worth.

When we pass to more obvious anatomical facts, we remark that when the extravasation has been present for a certain length of time, it presents a very curious appearance. The lung is more or less studded with blocks, nearly square, of very solid and hard material, of the colour of a clot of blood. Sometimes these are immediately beneath the pleura pulmonalis, sometimes deeper in the pulmonary texture; the boundaries of every block are remarkably defined, and evidently formed by the interlobular

partitions of cellular membrane, which divide each lobe into many compartments; the lung in the neighbourhood is commonly quite healthy, but occasionally there is a kind of gradation observed between the perfect apoplectic mass and the natural parenchyma; and, finally, no blood whatever is in general discovered in the bronchi. On making a section of a block, it presents the deep reddish-black colour of old coagulum of blood, shews a very firm and clean-cut surface, and has the granular texture observed in a hepatized lung. This is the condition of the apoplectic extravasations some time after their first formation. Of course they would present a very different appearance if seen at their commencement, but as such an opportunity has never occurred to us, we cannot speak from our own observation on the subject. M. Laennec, who gives an admirable description of the disease, takes no notice of its earlier stages, save in one short paragraph, where he mentions that abundant "exhalations of blood" into the lungs will sometimes produce sudden death; and on examining the bodies of such patients, more or less extensive clots of blood are perceived in the middle of the lacerated lung, precisely resembling apoplectic extravasations into the cerebral tissue. In a case of this kind, related by M. Corvisart, the effusion was so great, that the lung and the pulmonary pleura had been ruptured, and the blood had escaped in quantity into the pleural cavity. Before we quit this subject, we would caution our readers not to mistake the effusions of blood which take place in small vomicæ in diseased and tuberculated lungs for instances of pulmonary apoplexy; a mistake which we have seen occur more than once, and which an ill-informed or superficial observer might readily commit.

There is another point in the pathology of cases of contraction of the left auriculo-ventricular opening, to which we would allude, before we proceed to the consideration of the cases themselves. It is this, that, nearly in proportion to the growth and enlargement of the right ventricle, is the flaccidity and almost atrophy of the left. The reason is obvious, for the very obstruction that created a demand on the muscular power of the one, prevented the exercise of that of the other, and that which produced the augmentation of the former, by the same law of nature tended to the wasting of the latter. As the left ventricle grows small and feeble, the aorta and the whole of the aortic system also degenerate, and that, in some instances, to a very remarkable degree.

Having made these preliminary observations, which we think were required for the right understanding of the disease, we shall now relate the particular facts on which they have been founded.

Case 1. Mary Hawkins, ætat. 41, admitted Sept. 2d, 1829, under Dr. Seymour.

Face puffy, and leuco-phlegmatic, with a bilious tint—lower extremities œdematous—apparently some ascites—extreme orthopnœa—lies best on right side in consequence of "something falling over in her inside" when she turns to the left—liver felt enlarged, and the margin of its right lobe very sharp and distinct—some cough, with little expectoration and *no hæmoptysis*—palpitations—no pain in chest—dyspnœa on exertion, which indeed is impossible—distressing flatulence.

Pulse *small* and frequent—tongue moist—bowels open—urine scanty and high-coloured.

Has laboured under more or less dyspnœa for the last twelvemonths, increased by exertion and especially by ascent; palpitations for about the same length of time. Two months ago was confined, after going her full time, and the child was born alive but is since dead. Much flooding followed delivery, and she dates her orthopnœa and more urgent symptoms from that period. Has suffered for some time from pain in the epigastrium and region of the liver.

On placing the hand over the præcordia, a sensation of extensive though not powerful action is communicated to the fingers, and on making percussion the dull sound of

the heart is more extensive than natural. On applying the stethoecope to the præcordia, the heart's action is heard over all the left, most of the right thorax, and even above the clavicles—both auricular and ventricular sounds loud and clear—ventricular accompanied with more than usual impulsion. The ventricular systole and pulse at the wrist *do* correspond, *but the latter is remarkably weak in comparison.* No bruit in the aorta.

State of lungs not examined in consequence of the great dyspnœa.

DIAGNOSIS. *General dilatation of the heart—dilatation, with some hypertrophy, at least no diminution of the parietes of the ventricles.*

The patient was ordered a quinine draught twice daily, with aloes and squills at night, and cream-of-tartar drink. She sank quickly and died on the 5th, three days after her admission.

Sectio Cadaveris:—Legs œdematous—face puffy and of bilious hue.

Thorax.—Two or three pints of clear serum in right pleural cavity, compressing the lung into the top of the chest, and thrusting the diaphragm and liver downwards. Little fluid in left pleural cavity, and no adhesions.

Right lung greatly compressed by the fluid, carnified in some parts, gorged with serum in all. It presented two or three specimens of pulmonary apoplexy, one as large as the square pieces of Castile soap which are commonly sold in the shops. Left lung more respirable than the right, but œdematous and gorged with blood; it also presented some examples of pulmonary apoplexy.

Heart externally very large. Cavities of right auricle and ventricle greatly dilated—cavity of left auricle also dilated. Left auriculo ventricular opening much contracted by approximation of the two alæ of the mitral valve, which were not ossified, but extremely thickened and indurated, with some brittle *végétations* attached to them. Cavity of left ventricle and parietes nearly natural, but if any thing, rather dimminished in volume.

No induration of semi-lunar valves, but slight and easily separable végétations annexed to them—aorta not dilated, but presenting incipient steatomatous dispositions.

In the appendix of the right auricle a laminated coagulum like that of aneurism. In the left auricle, coagula so large and dense as completely, or nearly to fill the chamber. This polypus was clearly of some standing, being brown, not black, in colour, more or less laminated in structure, and containing in its centre a cavity filled with purulent-looking matter. Many smaller coagula in the appendix had cavities in their centre, containing matter like putrid pus. No injection of inflammatory appearance of the lining membrane of the heart.

Abdomen:—A small quantity of clear serum in its cavity. Liver descending low, and its right lobe presenting a remarkably sharp crescentic edge; its structure indurated, and resembling a nutmeg in appearance. Kidneys pretty healthy.

CASE 2. Elizabeth Martin, a married woman, from Surrey, æt. 35, admitted Sept. 16, 1829, under Dr. Chambers.

Anasarca of lower extremities—ascites—enlarged and indurated liver—pain in the right hypochondrium—palpitations of heart with venous undulation in the neck. Pulse 120, small, regular — skin cool — tongue white — bowels open — urine scanty and high-coloured.

Ill two years—much worse within the last two months — principal distress has been from dyspnœa and palpitations.

She was ordered mercurial inunction with nitre and diuretic medicines, but under these means she became much lower, and effervescing draughts with sp. æth. nit. were substituted. Aphthæ appeared upon the mouth and cheeks, she was troubled with vomiting, and on the 29th we find the following report:—

Says that yesterday afternoon she was attacked with pain in the right side of the chest and aggravation of dyspnœa. The pain has nearly subsided, but the difficulty of breathing remains with a frequent cough, and expectoration of froth and *blood.* Pulse

not so feeble as it has been—skin moderately warm. *Hirud.* xx. *pect. Resumatur Haust. Nitri.* c. *Vin. Ipec.* ℥ss. 4*tis. horis.*

30th. Breathing relieved—orthopnœa—sputa less blood stained. Sensation of burning all over her abdomen and up her throat, but pressure there does not cause pain—pulse very soft and small—tongue still aphthous.

A demulcent draught was prescribed, but the prostration increased, the burning sensation alluded to grew more severe, diarrhœa set in, and on the 1st of October the patient died.

Sectio Cadaveris. Lower extremities anasarcous—body not deficient in fat.

Thorax. Very great quantity of yellow serum in right side of chest, with lymph, partly recent, partly old, on the pleuræ, and irregular intervening bands. Same appearances but not to so great a degree on the left side.

Right lung compressed, as it were into a corner by the fluid; crepitating, and that imperfectly at the apex only; and studded with apoplectic extravasations of blood, intermixed with portions of parenchyma nearly colourless but remarkably solid and hard. Left lung in a similar condition, but rather more respirable than the right.

Some clear fluid in the pericardium. Heart extremely large. Cavities of right auricle and ventricle and of left auricle much dilated, and their parietes hypertrophied; hypertrophy of right ventricle particularly remarked. Cavity and parietes of left ventricle on the whole little altered.

Valves on right side healthy—*pulmonary artery dilated.* Mitral valve thickened, and its aperture considerably straitened—its chordæ tendineæ very thick. Semilunar valves of aorta thick and indurated. Aorta itself *very small*, with slight and incipient steatomatous deposites.

Abdomen. Little fluid in this cavity. Liver enlarged, hard, of a nutmeg appearance, and gorged with black blood. Spleen small, but hard. Kidneys hard but otherwise healthy. Small serous cysts connected with the ovaria.

Cranium. Much clear serum between arachnoid and pia mater—veins rather turgid—more serum than usual in ventricles.

In the foregoing case, the stethoscope, as far as we know, was not applied; it was supposed to be one of enlargement of the heart, but the precise nature of the disease was not suspected. In the following instance, the diagnosis drawn from the stethoscope signs will be found to be tolerably exact.

CASE 3. William Lambert, æt. 52, a green-grocer, admitted Sept. 13, 1829, under Dr. Chambers.

Cough—expectoration of viscid mucus, much stained with arterial blood—pain under sternum—dyspnœa—indisposition to lie on right side, which he is said, in Dr. Chambers' book, to expand most in inspiration—belly swelled and ascitic—liver enlarged and indurated—legs slightly œdematous. Pulse 70, small, weak, regular—skin cool and dry—tongue red, clean, moist—bowels open from medicine—urine scanty and high-coloured.

Attacked with cough and dyspnœa about Christmas last—abdomen has been swelled on or off for two or three months; the legs for about a week.

Cupping, diuretic medicines with purgatives, and mercurial inunctions, were the means employed, but being purged and becoming very low, he was allowed a gill of gin in water daily. On the 22d, when we first examined him, we made the following report.

Cough very troublesome, especially at night, when he spits much frothy mucus, stained with blood—distressing pain across lower end of sternum increased by a full inspiration, which excites cough—breathing extremely short—orthopnœa—decubitus difficult on either side, but he prefers lying on the left—night delirium—distressing flatulence. Pulse very small, but regular and not rapid—skin cool—face not swelled—tongue yellowish, loaded—bowels open—urine scanty and high-coloured.

Pulsation in epigastrio and under left nipple, but not violent. On using percussion, an extensive dull sound in the cardiac region—sound pretty good on upper and anterior part of left thorax, not so good behind

and below. Sound indifferent in right thorax. On applying the stethoscope, respiration loud on either side of chest below clavicles, more obscure and bronchial below, especially on the right side.

Heart's action heard extensively, especially in a transverse direction, and very audible below *right* clavicle—sound of ventricle dull—little impulsion, but most in the situation of the right ventricle—no bruit—no irregularity.

DIAGNOSIS. *Effusion into either side of thorax, particularly right—pulmonary apoplexy?*

No hypertrophy of heart, unless the right ventricle be somewhat increased in the power of its parietes—dilatation of cavities.

Certainly obscurity about the case.

He made no improvement and a large blister was applied, and the ulcerated surface dressed with mercurial ointment. On the 3d of October the blister was repeated, but he gradually sank, and finally died on the 13th. The medicinal treatment chiefly consisted of anodynes.

SECTIO CADAVERIS:—Body much emaciated—skin sallow.

Thorax. Nearly a gallon of clear yellow serum in right pleural cavity—pleuræ themselves injected, and coated with false membranes. A little fluid in left side, without any lymph.

Right lung compressed to one-third its natural size, and tucked up into the top of the chest—inferior lobes *carnified*,* and quite impervious to air. Upper lobe not so destitute of crepitation. At posterior and inferior part of lung a block of rather ancient apoplexy, with a kind of circumvallation of hepatized lung around it.

Left lung gorged with serum in its lower lobe—at inferior and anterior part a square block of apoplexy.

No fluid in, nor adhesions of, the pericardium. Heart of enormous size—auricles and right ventricle much dilated with little alteration, but no diminution, in the parietes of the latter. Cavity of the left ventricle quadrupled at least, and its parietes so thin, that at one part only the lining membrane and pericardium remained. The internal membrane presented steatomatous depositions, similar to those of the arterial tunics, and in many places it was abraded like them by ulceration; to these ulcerated parts old laminated coagulum adhered. Opposite the thinnest part of the parietes of the ventricle, a mound of organized lymph had been laid on the pericardium investing the heart, evidently for the purpose of protection.

Valves quite healthy—arch of aorta rather dilated.

Abdomen:—Some fluid—liver enlarged, hardened, and of nutmeg appearance. Other viscera healthy.

Cranium:—Not examined.

In this case there was no disease of the mitral valve, but the extreme dilatation and tenuity of the left ventricle as compared with the right, the parietes of which maintained their natural force, destroyed the balance of power, and threw the weight of it into the scale of the right side of the heart. The consequences in a physiological point of view were nearly the same as if the left auriculo-ventricular passage had been obstructed; the lungs were exposed to an undue degree of violence, and pulmonary apoplexy ensued.

CASE. 4. Examined Dec. 2d, 1829.

A stout, athletic, and apparently middle-aged man, received a fall or a violent injury, was brought into the hospital, and died in some six and thirty hours, apparently from internal hæmorrhage.

On opening the body the cause of death was found to be an extensive rupture of the spleen and effusion of blood into the cavity of the peritoneum. We were occupied at the time in opening another body, but after the examination of this patient was completed, and the gentlemen operating had disappeared, we were struck by the size of the heart which had been exposed but left untouched.

It was at least twice as large as natural.

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* Carnification differs, toto cælo, from hepatization in this, that it is not the result of inflammation, but of compression from fluid, &c.

The right auricle greatly dilated and its musculi pectinati preternaturally strong; the right ventricle not much dilated, but decidedly hypertrophied, the increase of power being chiefly, as usual, in the columnæ carneæ. *The pulmonary artery was large.* The left auricle dilated and somewhat hypertrophied. The left ventricle was neither dilated nor hypertrophied, but flaccid in its parietes, and its columnæ were positively smaller than those of the right.

The left auriculo-ventricular opening was so narrowed as to form a kind of rima or chink an inch in length, and scarcely more than two lines in breadth at its widest part. The limbs of the mitral valve and contiguous portion of the internal tunic of the auricle were corrugated, thickened, and roughened by sharp, firm, bony scales.

The lungs were so destroyed that we could only collect portions of them. There were old adhesions of the pleuræ in many places—a disposition to carnification—and in one place a small but genuine specimen of pulmonary apoplexy.

This patient had no dropsy, and of his history we know nothing, but it is not a little singular that with disease in so advanced a stage and of so serious a nature, he should still have been capable, as to all appearance he was, of following a laborious occupation. The only other example of this disease which we have hitherto had an opportunity of witnessing was in the case of a female patient of Dr. Wilson's at the hospital. We did not see her during life, but she was considered by Dr. W. to labour under organic disease of the heart. On dissection there were found:—apoplexy of the lungs to a considerable extent — general enlargement of the cavities of the heart, excepting that of the left ventricle—hypertrophy of the right ventricle—much narrowing of the left auriculo-ventricular opening and puckered bony condition of the mitral valve—flaccidity and atrophy of the left ventricle.

In a small but beautiful collection of preparations belonging to Dr. Hewett, is a specimen of this contraction of the left auriculo-ventricular opening. Appended to the preparation is a note of the case and the dissection, in which it is stated that several solid square blocks of "hepatization" were discovered in the lungs. Upon consideration, Dr. Hewett is of opinion that these were in reality instances of pulmonary apoplexy, an affection which was not at the time of the examination sufficiently understood in this country.

M. Cruveilhier, in the third livraison of his valuable series of plates on morbid anatomy, mentions the particulars of a case of extensive apoplexy of the lungs, conjoined with contraction of the left auriculo-ventricular opening.* In that instance the French pathologist states that the *left* ventricle was hypertrophied, and he refers to a case of M. Andral's in which hypertrophy and dilatation of the left ventricle existed, without any affection of the mitral valve or left auriculo-ventricular opening. In M. Andral's case, however, the aorta was remarkably small. These are all the cases of this interesting affection that we have witnessed, or to which we can refer at present, although we must confess that we have not consulted many authors on the occasion. We think that the report of the four or five cases from St. George's Hospital, occurring within so short a time of each other, is a better proof of the comparative frequency of the disease, than any laborious quotations or researches.

The symptoms must be considered as very obscure, but still we think that by combining the general phenomena of the disease with the hints supplied by the stethoscope, we may perhaps be enabled to form a pretty just suspicion.

In general there seems to be more or less dropsy, especially in the form of anasarca of the lower extremities—dyspnœa and the other usual symptoms of organic disease of the heart—cough, and in many instances some hæmoptysis. The pulse in all the cases which we have seen, or of which we have read, has been *extremely small*, and

* This case will be found detailed in the 23d Number of this Joural, page 87, et seq.

here we may observe, par parenthése, that the common notion of a small pulse being occasioned by disease of the semilunar valves of the aorta, is in ninety-nine cases out of the hundred erroneous. At the time that the pulse is so small, the extensively dull sound on percussion of the cardiac region indicates enlargement of the heart, whilst the action of the ventricles is more tumultuous, and their systole, especially in the right ventricular region beneath the sternum, will probably be attended with more impulsion or shock than natural. There may or may not be a *bruit*, but if the hypertrophy and dilatation of the right ventricle be considerable and the pulmonary artery large, we think that it commonly exists. If present, it will then be distinct in the region of the pulmonary artery, which is close to the left side of the sternum, between the cartilages of the second and fourth ribs. At the time that the heart is acting vigorously and the *bruit*, or increased action without a bruit, are discovered in the pulmonary artery, the *arteries* in the neck will be tranquil, and the stethoscope placed above the right clavicle will detect no impetus or unusual sound in the aorta. We think that the foregoing combination of symptoms will in most instances enable a man of tolerable sagacity and tact to recognize the disease, but as yet we know too little to dogmatize upon the subject. H. J.

LIV.

ROYAL INFIRMARY OF GLASGOW.

LOOSE CARTILAGES IN THE KNEE-JOINT.*

Case. D. M. ætat. 24, farm-servant, complains, Dec. 3d, that the motions of his right leg are much impeded by some firm moveable bodies in the cavity of the knee-joint. He thinks they are three in number, but has never been able to fix more than two of them at one time; the largest is the size of a hazel nut, the smallest that of a field bean. No increased secretion of synovia nor inflammation of the joint. States that two years ago he first felt uneasiness in the joint when at work, and twelve months afterwards observed a loose body moving in the joint. This was removed five months ago, and when he recovered from the operation the present ones were discovered. On the 7th, the substances being previously secured at the inside of the joint, and an assistant having drawn the integments outwards, an incision was made at once through the integuments and capsule of the joint, and the two substances easily extracted.

The lips of the wound were brought together by plaster and bandage, and motion effectually prevented by a splint placed under the limb. On the 12th the wound was firmly healed, and on the 29th the patient dismissed cured. On examining the substances removed from the joint they appeared externally to be entirely cartilaginous, but on making a section of each the smaller was found to be nearly equally composed of cartilage and bone, the larger much more completely ossified.

"It has been stated that the existence of such bodies is generally accompanied with increased secretion of synovial fluid. In some of the first cases of this description, particularly in that given by Paré, a very considerable effusion into the knee-joint had taken place, and the operation of opening the joint was performed to evacuate the fluid, and during this, the foreign body presented itself at the opening, and was extracted. In general, the discovery of such substances has been preceded by injuries of the joint and slight inflammatory action; but in others, sudden lameness takes place, and examination of the joint discovers the cause, without any well marked inflammation.

"With respect to the substance of which they are composed, I believe them all to be primarily effused lymph, but in process of time they become cartilaginous, ossified in part, and ultimately wholly so. In repeated instances have such bodies extracted from the same knee presented all these characters, thus proving that the difference of tex-

* Glasgow Journal, No. VIII.

ture depended solely on their duration in the joint.

"Some have regarded these substances as pieces of cartilage, detached by falls or bruises from the articulating surfaces of the joint; while others, and with more reason, consider them as arising quite independent of this cause.

"Monro, Baillie, Richter, Wardrop, and others, have found similar substances, cartilaginous and osseous, in the tunica, vaginalis testis, complicated with hydrocele; and one example of this kind came under my own observation. In some of these instances, small portions of coagulable lymph were likewise found.

"I have had no opportunity of examining the knee joint of any person who died with such substances in the joint, nor am I aware of any such dissection being on record; but judging from the appearances in the coverings of the testicle, when similar bodies are found there, I should be inclined to expect that where they form in the knee or other joints, they are the result of inflammatory action, producing effusion of lymph, which passes through the cartilaginous state into the osseous. The capsular ligament, when the disease has continued long, will, in all probability, be thickened.

"The old axiom, that wounds of joints if not mortal are exceedingly dangerous, has still influence over the minds of some practitioners, and induces them to recommend a palliative treatment by means of bandages, to removing them by an incision.

"When, however, no inflammatory action is present in the joint, when the patient is young and healthy, and means are taken to prevent all motion of the joint after the operation, I conceive the extraction of these bodies as by no means likely to be attended with danger. There are some constitutions, however, in which the most trifling operation is likely to prove dangerous; and I once saw most alarming symptoms follow the operation, attributable, however, in some degree, to the patient having used the limb soon after the operation. It is always proper to put this out of his power, by means of splints."

We are disposed to agree with Mr. Cowan in believing that this operation has been regarded with a too superstitious dread by the older surgeons. We must take care however lest we run into an opposite error, and exchange the extreme of caution for temerity, an exchange which would certainly be for the worse. Some patients have died after the operation for removing loose cartilages from the knee-joint, and more have been placed in imminent peril. What all the world says may not be strictly true, but it never is entirely false, and all the world have pronounced that a wound of a large joint is not to be looked on as a bagatelle. We grant that bad consequences seldom ensue except in a person of weak habit or injured constitution. But this kind of argument is not worth so much as might be thought, for the evidences of that bad habit and constitution are by no means always apparent before the operation, and consequently the surgeon only ascertains it by the result. Of this we have seen more than one example. With regard to the application of splints, we can bear our testimony to the advantages derived from their employment. If perfect repose is procured for the joint and vigilant caution exercised in guarding against inflammation, we believe that loose cartilages may be extracted from the articulation with much *less* danger than is commonly believed. For the mention of one or two interesting cases we may refer the reader to the 20th Number of this Journal, page 524.

LV.

SOUTH-EASTERN DISTRICT GENERAL DISPENSARY.

REMARKABLE CASE OF FUNGUS HÆMATODES IN THE STOMACH AND LIVER; WITH THE APPEARANCES ON DISSECTION. By J. THWAITES, M. D. Physician to the above-mentioned Dispensary.

November 17th, 1829. Eliza Maguire, æt. 50 years, has been affected for some months

past with frequent attacks of pain in the stomach and abdomen, resembling colic, sometimes attended with vomiting of blood. Appetite very uneqnal—at intervals so craving that nothing seemed to be too nauseous for her stomach, and exciting the *greatest impatience* for food, so much so that she would frequently (to use the expressions of her relatives) "snatch the meat from the vessel in which it was preparing, even before it was fit for use;" bowels generally costive; tongue foul, and an unpleasant taste continually in her mouth; skin cool and soft; strength tolerably good; countenance pale, but not much emaciated; no cough or dyspnœa; sleeps well; spirits very good; is not apprehensive of danger. She has three tumours in the epigastric region, each about the size of a small apple, perceptible to the view as well as to the touch—hard, apparently lobulated, as if composed of smaller tubercles, united into one large tumour. They are movable to a certain extent, and not painful when subjected to tolerably strong pressure.

States that, some months ago, she passed two tape worms of considerable size; that her mother died of two tumours in the abdomen; that her brother nearly lost his life about two years ago from a severe attack of hæmatemesis, and that she lost a daughter from the same cause. Her husband has been dead many years—she has had four children.

Nov. 18th. Pulse natural; tongue white; bowels confined; no pain of abdomen on pressure; total disinclination for food; no thirst; spirits good.

℞. Pilul. Rhei c. grana x.
—— Hyd. gr. x.
Ox. Bismuthi, ℈j. M. ft. pilul no. viij. una ter de die sumenda.

19th. States that she feels somewhat better to-day; slept well last night; bowels affected by medicine twice; stools dark-coloured; anorexia continues; pulse natural; spirits very good. Lumps unaltered. Cont medicamenta.

21st. Continues to improve; tumours apparently softer, and one somewhat reduced in size; bowels moved regularly each day; pulse natural; tongue cleaner; appetite better; she is very anxious to have some broth, which was permitted. Cont. med.

℞. Hydriod. Potassæ, ℈ij.
Ung. Hyd. ʒss.
Liq. Potass. gutt. x.
Ung. Simpl. ʒjss. M. ft. unguentum; cujus ℈j. super tumores illinetur, nocte maneq.

From this time until the 26th, she did not experience any material alteration in her symptoms. The tumours became softer—one altogether disappeared; the bowels were free, and the stools became each day more dark, as if mixed with grumous blood. On the 26th, she expressed considerable anxiety about the state of her stomach, which she described to be full and distended; bowels in the same state, tongue not so clean; not any perceptible change in the feel or appearance of the abdomen to pressure, except in the lumps, which appeared more moveable, and admitted the interposition of the fingers when much pressed. Omittr. medic.

I was sent for in great haste this evening about 7 o'clock, having been told that she was dying. When I entered her room, a great part of the floor was covered with blood and pus, as if discharged from an extensive abscess; a small bowl full of blood also lay beside her bed. She was considerably agitated—strength much reduced—pulse 130, small and weak—her voice far from strong, but her articulation quite distinct—abdomen and tumours unaltered—bowels had been freed a short time before the discharge from her stomach; but there was no unusual appearance in her stools.

Ordered a restorative draught of water of ammonia, tinct. rhei, and camphor mixture—also a solution of muriate of soda in water having been recommended by a friend, no objection was made, and she was directed to take a table-spoonful every two hours.

29th. She was much revived by the draught; no return of the vomiting since; pulse 120, stronger; bowels freed twice since—passed much blood. Tongue furred

and loaded; thirst considerable; total loss of appetite; tumours in the same state; not painful to pressure when not severe; spirits somewhat revived. Is apprehensive of a return of the hæmorrhage; countenance composed.

28th. Continues in the same state; no return of vomiting; bowels free; stools dark; pulse 120, small; tongue white; skin soft; spirits good; no pain. To resume the medicines.

29th. Complains of great fulness of the stomach, a frequent sensation of something rising in her throat, which she kept down by as frequently swallowing it again; bowels free; stools the same; tongue white; pulse 120; tumours in the same state. Continuantur medicam.

This evening she had a return of the hæmatemesis, from which she felt greatly exhausted; extremities cold; still free from pain. Endeavoured to restrain the flow of blood by swallowing it as it came to her mouth. About 10 o'clock a repetition of the hæmorrhage ensued, and in a violent exertion to discharge her stomach she expired.

Sectio Cadaveris. External characters:—Countenance calm; extremities not much emaciated; abdomen much swollen, but by no means tense; tumours concealed from the view by the abdominal distention, but very evident to the touch.

Upon cutting into the abdomen, the first appearance which presented itself was a large abscess on the internal surface of the right lobe of the liver, close to its anterior edge. It was filled with a white purulent fluid, resembling thick cream, not exhaling any peculiar odour. On the surface and in the substance of the liver were to be found numerous small tubercles, about the size of a nut, in various states—some hard and chalky, others softer, and many more in a state resembling that first described; the gall-bladder was thickened in its coats, white in its external appearance, and full of calculi of various sizes; adhesions were also evident between the liver and surrounding viscera. The spleen somewhat larger than usual. The duodenum and small intestines distended, and containing large quantities of coagulated blood. Mesenteric glands considerably enlarged, and of a pale or rather white appearance.

In the stomach, however, lay concealed the chief cause of her last illness. External to the pyloric orifice there was a small appearance of ulceration, which, however, did not penetrate the coats; the internal surface was slightly inflamed around the pylorus; the parts intervening between that and the cardiac orifice were perfectly sound, if we except the thickening of its coats. Immediately adjoining the cardiac orifice was a large tumour, ulcerated, and of a dark chocolate colour; the first view strikingly resembled fungus hæmatodes deeply ulcerated; its substance was the same as the tubercles before described, and when broken between the fingers, gave out a dark-coloured watery fluid. Around it were numerous smaller tumours, which gave a tuberculated and thickened feel to that part of the viscus. When washed, the tumour did not lose its dark appearance. The contents of the stomach chiefly consisted of thick clots of blood. The lungs were perfectly healthy, and the heart equally sound in appearance, but rather soft to the touch, or when cut into with the scalpel.

The brain was not examined.

I have been thus minute in the postmortem description, as I consider that, in diseases of the stomach, the pathology of which is still veiled in such obscurity, whatever may, even in the most remote degree, tend to throw a light upon the nature of these diseases, must be valuable to the profession at large, and although the case here described may still further prove the inefficacy of medicine in *removing* the source of suffering, yet much may be learned as to the palliative treatment under similar circumstances in future, from the perusal of cases similar to the present. Had the extract of conium, hyosciamus, or of opium been employed instead of the purgative plan pursued, it is more than probable, that whatever might have been her sufferings, she still might have lived to partake of the sorrows or enjoyments of a world to which she had been wedded by an

awful, and to her friends a melancholy, attachment.

N.B This person never suffered from the jaundice, and she had no symptom of hepatic disease, any further than such as were connected with the state of her stomach.

LVI.

GLASGOW ROYAL INFIRMARY.*

Our Glasgow contemporary, we see, has changed masters, Mr. Mackenzie retiring from the helm, and Drs. Buchanan and Weir stepping into the vacant post. We trust that the alteration will not be for the worse, and that a journal from which we have derived much information, and which has always been conducted in a tone of proper and gentlemanly feeling, will not be suffered to languish and die. The reasons for the change of editors we do not profess to know, though the sign is generally considered an ominous one in the history of medical periodicals. Whatever it is, we beg to offer our best regards to Mr. Mackenzie on his ceasing to be one of our confréres.

I. FRACTURES, SIMPLE AND COMPOUND.

"The fractures of the thigh and leg were all put up in the straight position, with Dessault's splints and bran pillows, as usual at this hospital, and with one exception, were all cured without the slightest shortening or distortion of the limb. In that case the bone was obliquely fractured immediately below the trochanter: the man insisted on leaving the house before union was quite perfect, and he fractured the same thigh a second time, and afterwards could not bear the necessary extension. In the case of a feeble old man of 73, the bone was found united in 46 days, and he was dismissed soon after without the slightest shortening, although the fracture was oblique and in the upper third. In another case, a stout Englishman, aged 50, a china hawker, previously in good health, the fracture occurred immediately above the condyles, and was occasioned by strong muscular exertion, while endeavouring to raise a heavy basket of china. It was united at the end of eight weeks. A fourth case, was a very severe comminuted fracture about the middle of the thigh. A cart heavily loaded passed over the limb, and besides breaking the bone, produced considerable bruising of the soft parts and a small wound of the integuments. This was sent in as a very bad case, but the limb was immediately put up, and union took place without any accident in 44 days. In the other three cases, one of which was a boy aged two and a half years, the bone was broken about its middle, and nothing unusual occurred.

"The two cases of fractured fibula were put up with a single splint on the inside of the leg, as recommended and practised by Dupuytren, a figure of eight bandage being applied round the ankle. This method appears to me well adapted to prevent the lateral displacement of the inferior end of the bone, so apt to take place when the fracture occurs, as it generally does immediately above the external malleolus."

In a case of rather severe compound fracture of both bones of the left leg about three inches above the ankle-joint, dry lint was applied, the leg put up in splints, and the dressings, &c. left undisturbed for *five weeks*, when merely a healthy looking superficial ulcer of the integuments remained. In the course of another week the sore was cicatrized. A case of compound fracture of the olecranon proved fatal.

Case:—M. M. æt. 46, drunkard, of bad constitution, was admitted Sept. 4, having fallen in the street, and fractured the neck of the humerus and the olecranon transversely; wound of the integuments leading to the fracture—much swelling of the limb—considerable effusion into the elbow-joint. Leeches, &c. were applied, the swelling subsided, but profuse suppuration took place, communicating with the joint, and extending nearly to the axilla and some way down

* Glas. Journ. No. IX.

the fore-arm. Two loose portions of bone were removed, wine and spirits with opium and carbonate of ammonia were liberally given, but she sank under the irritation and wasting discharge. Sloughing had taken place to a great extent along the outside of the arm, a free opening into the elbow-joint existed which was much diseased, the integuments were undermined as high up as the scapula, and the cellular membrane was sloughy throughout, the fracture of the neck of the humerus was nearly united, and no disease existed in the chest or abdomen. The two following cases are interesting; the first appearing to Dr. Weir to illustrate in a striking manner, the good effects of the practice of little interference after the dressings are properly applied.

Case. "J. M'A. aged 65, was knocked down by a carriage, the hind wheel of which passed over left leg, and fractured both bones about three inches above ankle joint. The fracture of the fibula was comminuted, and there was a wound of the integuments, close upon the inner edge of the tibia, through which the probe could be passed to the fractured ends of the bone, and also under the integuments for some inches in every direction. There had been considerable hæmorrhage from the wound, and much bruising and swelling of the whole limb. The leg was immediately put up in splints, dry lint being applied to the wound. These were removed for the first time at the end of *five weeks*, when the fracture was found united, and there remained only a superficial healthy looking ulcer of the integuments. The splints were again applied for another week, and then finally removed, when the sore was found cicatrized. He never had a bad symptom, and was dismissed in good health. In this case, had the wound been left exposed, and leeching and warm poultices had recourse to, which I have seen done in similar accidents, I have no doubt that great inflammation and suppuration would have taken place, and the leg probably lost, or if not, a tedious cure would have been the consequence.

"In a second case, where the wound of the soft parts appears to have been originally as trifling, amputation was required at the second period, and the man recovered contrary to expectation.

"A. P. aged 50, was admitted on the 1st September, with a transverse fracture of the left tibia, two and a half inches above the ankle joint, and a severe comminuted fracture of the fibula of the same leg. The accident was produced by the wheel of a loaded cart passing over the limb seven days before admission. There was a small wound of the integuments discharging thin unhealthy matter, and through which the probe passed to the fractured ends of the tibia. The whole limb was very much swollen, the integuments of a red colour, and vesications existed on its lower third, apparently produced by irregular bandaging previous to admission. His general health was bad. He laboured under pneumonia, and had been subject for many years to cough and dyspnœa, with occasional hæmoptysis. These complaints had been increasing for some months previous to the accident. He lost thirty ounces of blood at two bleedings, which was buffy and much cupped; the chest was blistered, and he was put upon calomel and opium; the wound was dressed with turpentine liniment, and the discharge being profuse, the dressings required to be removed every three or four days. The pectoral inflammation subsided in about a week, but the wound in the leg enlarged gradually, and in a few days it became sloughy, and the superior fragment of the tibia was exposed denuded to the extent of several inches. His strength now fell off rapidly, and the limb was removed on the 19th September. The fracture of the tibia was found to have extended into the ankle joint, the inferior fragment having a fracture running nearly perpendicularly through it. The joint contained a quantity of fetid pus, and the cartilages were in some points destroyed. The fracture of the fibula was much comminuted, and several portions of it were wholly detached, and lying loose among the integuments. The pulse fell immediately after the operation; his appetite became keen; his pectoral complaints did

not return; and with the assistance of quinine and a nourishing diet, he rapidly recovered, and was dismissed, on 1st November, in perfect health."

The latter is a very fortunate and a very instructive case. It has been remarked by the most experienced surgeons, at least we have heard Mr. Brodie make the observation, that when patients are labouring under diseases of the joints and symptoms of thoracic disease, the latter will occasionally be removed by the removal of the former. On this principle we have seen Mr. Brodie perform amputation for diseased joint, when the patient had most of the symptoms of phthisis, and in one or two cases the issue was successful. The present instance would seem to be one of the same kind, and is calculated, with what we have mentioned, to encourage surgeons not to abandon a patient as always improper for an operation, because the thoracic organs may appear to be affected.

II. DELIRIUM TREMENS.

The attention directed to this remarkable disease of late years has been productive of excellent effects, by setting surgeons and physicians on their guard, in the use of the lancet and antiphlogistic measures. In this the blindest may perceive the advantages arising from the cultivation of periodical literature, the medical journals conveying the dicta of experience to those who have had no experience at all; and putting one man on his guard by the record of an error that has happened to a brother practitioner separated from him by many a mile, perhaps by the broad ocean, speaking another tongue, or habiting another hemisphere. Would it were for this alone that the medical periodical press is distinguished, for all might then be proud of wielding an engine of good. This, however, is an inglorious kind of fame, not coveted by the factious spirits of the day, who aspire only to hurl the brand of discord into the bosom of the profession, and reduce every member of it to the level of their own vices and buffooneries.

Their mouth is black as bull dog's at the stall;
They scratch and bite, and spare ne lace, ne band,
But bitch and rogue their answer is to all.

But away with the thoughts and the mention of these foul traducers, and let us pass once more to the pleasing occupation of receiving and conveying professional instruction.

Case. "P. C. a healthy man, aged 21, was brought into the hospital on the 18th September, having suffered a simple fracture of the left tibia a little above its middle. Two days after admission, he was seized with delirium tremens. At midnight he tore the splints and bandages from his leg, and walked about the ward, and it was necessary to strap him down to bed and put on a strait jacket. Next day the disease was well marked. Besides the usual symptoms of incoherency and constant jactitation, the great loquacity, the spectral illusions, and the total forgetfulness of the accident, symptoms so peculiar to this affection, were all distinctly present. Notwithstanding the liberal use of opium and spirits, to which he had been previously addicted, with the addition of shaving the head and keeping it constantly cool, the disease increased. One grain of opium was given every two hours, and laudanum was exhibited in the form of enema. About twenty-four hours from the commencement of the attack, after having been for a short time extremely violent, he fell into a profuse perspiration, and became rather more quiet, but rapidly sunk, and died within thirty hours from the first appearance of the delirium. This man never slept during the attack. On inspection there was a small quantity of serum found in the ventricles of the brain, and also at the base; there was no effusion beneath the membranes. The vessels of the pia mater were minutely injected with blood, and the substance of the brain, when cut into, presented very numerous bloody points. The brain was unusually firm, and altogether more vascular than natural."

Another case of delirium tremens, following a more severe injury, occurred at the infirmary during the last Summer. The disease was checked on the third day by opium

and the use of spirits, to excesses in which the patient had been addicted. Our readers must be aware that M. Dupuytren, who has given a good description of this traumatic delirium, maintains that opium answers better when administered in enema than when taken by the mouth in the usual way. In the case to which we have just been alluding the correctness of the Baron's statement was exemplified, for the drug "whilst given by the mouth did not seem to produce much effect, but a full dose by the rectum was soon followed by a tranquil slumber," and rapid amendment ensued. The following remarks of Dr. Weir are very just.

"Delirium tremens is by no means an unfrequent disease. It is often seen in hospitals after injuries or operations, but many cases occur in confirmed drunkards without this complication. So far as I have observed, it usually continues from two to eight or ten days, although it is sometimes met with as a chronic affection. It is not often fatal. It very generally yields to opium, and this requires to be given in full and repeated doses, until sleep be procured. When this takes place all danger is generally at an end. Indeed the chief point in the treatment of this affection is to procure sleep. Although the opium and other means employed should produce a complete cessation from delirium, and the patient should become comparatively calm, coherent and collected, still if sleep does not take place, I believe very little good is accomplished. The disease will return again and again; opium therefore requires to be exhibited until this effect be produced, whatever may be the dose necessary. It has sometimes been given to the extent of a scruple in twenty-four hours, and with the best effects.

"From the general appearance of the patient in this peculiar affection of the nervous system, it has often been looked upon as an inflammatory affection of the brain, and treated with copious bleeding, brisk purging, blistering, &c. The lancet, however, is scarcely ever admissible, unless perhaps, in strong robust subjects who have not been much addicted to intemperate habits. I think I have seen bleeding adopted without any bad consequences following, although in the great majority of cases it will be hurtful. Some practitioners think that too much confidence is placed in opium in the cure of this affection, to the entire exclusion of every other remedy; but the result of the practice of giving large and repeated doses of this medicine, has been so very generally favourable that its efficacy is perfectly established. As to its *modus operandi*, or how it came to be employed in a disease where an opposite mode of treatment would appear to be so necessary, we have less to do, since the fact of its success is undoubted. It seems to produce its beneficial effects by soothing the excessively restless and irritable state of the patient, and by procuring sleep. That the disease is an affection of the brain and nervous system there can be little doubt, although the cases which end fatally do not in general exhibit any very well marked traces of organic derangement. From its sometimes ending in apoplexy or palsy, it may be supposed that there must exist some degree of fulness of the vessels of this organ, and there has sometimes been found, on dissection, serous effusion beneath the membranes and into the ventricles."

We can bear testimony to the excellent effects of opium in some of these cases of traumatic delirium. We lately witnessed a most remarkable instance of the affection in the person of a man who was much addicted to intemperance of all kinds, and who had met with a fracture of the bones of the leg. The case was considered by all to be a very bad one, and the quantities of gin and opium administered were very considerable indeed. The patient, who was in St. George's Hospital, eventually recovered, although he laboured under the delirium for *several weeks*, and an abscess formed in the cellular membrane about one shoulder. In another instance the exhibition of opium was not so successful, gangrene of the fractured limb supervening and proving fatal.

III. BURNS.

It is probably known that carded cotton is much used at the Glasgow Infirmary, in cases of scald or burn. It is the favourite application there to all recent burns. In the

case of a collier, admitted on the 22nd of June, with his face, hands, and arms very much scorched from an explosion of fire damp, and the parts thickly coated with the coal dust, the whole was completely cicatrized in three weeks. The burn was severe on the face, but the cotton was changed once or twice only, and not the least scar was left. This man was delirious for some days after admission, and had many symptoms of approaching effusion into the brain, but these were checked by the liberal use of opium, which Dr. Weir has generally found of great service in affections of the head succeeding burns and scalds. In a case of extensive burn which proved fatal fourteen days after the accident the "posterior lobe" of both lungs was found partially consolidated by recent inflammation; the pleuræ were adherent, the mucous membrane of the bronchia red, and in several places covered with muco-purulent matter. The brain and abdominal viscera were healthy.

IV. LUPUS TREATED BY THE IODIDE OF MERCURY.

"One very interesting case of this disease was in the Hospital for some months. I mention it here, because it has been greatly benefitted by a medicine which is not yet much employed in this quarter; I mean the iodide of mercury.

"A. A. a healthy country girl, aged 21, had suffered under lupus for thirteen months at the time she was admitted. The tip and alæ of the nose were the parts affected, and there was a small portion of the cheek also involved, and the disease had in some degree spread to the inside of the nostrils. It presented in several places the distinct tuberculated appearance of lupus, and in other places had proceeded to ulceration, although this was not very deep. She had undergone a course of mercury, and used a great many local applications; among which were the nitrate of silver and a solution of arsenic, but with little permanent benefit. After her admission lunar caustic was repeatedly applied to the affected parts, and she used an ointment composed of mercury, camphor, and turpentine, and also a strong arsenical ointment, but not with much effect. The iodide of mercury, in the proportion of six grains and afterwards nine grains, to an ounce of simple ointment, was then used daily, and under this application many parts skinned over, and the disease was in a great measure subdued. She used it for several weeks in the Hospital, and since she was dismissed some of the small tubercles have re-appeared, but were speedily destroyed by the slight ulceration produced by the ointment. In this case, the disease, although not yet completely eradicated, has been kept under, and more completely relieved by this, than by any other application.

"I have also used the same preparation, but stronger, in a case of curious anomalous tumours of the face, somewhat resembling the melanosis, but evidently not malignant, although it could not prevent the re-appearance of the affection. I think this preparation of iodine and mercury will be found to answer in many cases of ulcerations where other escharotics, murias hydrarg. nitras argenti, arsenic, &c. have failed."

Here we must stop for the present, but some interesting cases remain to be noticed at a future opportunity.

LVII.

MADRAS MILITARY HOSPITAL.

ON ELONGATION AND UNNATURAL POSITIONS OF THE COLON. BY JAMES ANNESLEY, Esq.

In the second volume of Mr. Annesley's splendid work on Indian Diseases, there is a section under the above title, containing several interesting cases, some of which we shall here notice.

In ten of the plates there are representations of these unnatural positions—some of

them perhaps the original course of the colon, in other words, congenital—others evidently the result of functional disorder running into organic change. Mr. A. thinks it not improbable that accumulations formed in the lower part of the colon, and the restraint which is often put upon the inclination to stool, may induce irregular flexures and displacements of portions of that gut, and even an elongated state of it. He thinks also that the supervention of these consequences is favoured by a relaxed state of the mesocolon, the peritoneal covering of the bowels, and more especially of the longitudinal bands. We often find, in cases of old hernia, considerable displacement and elongation of the colon, and a stretched appearance of the peritoneum and mesentery; the parietes of the bowels being free from morbid change. The impaction, he thinks, of hard fæcal matters about the sigmoid flexure of the colon may produce a condition analogous to the above, and that this part of the gut may be carried lower into the iliac region or into the pelvis by the increased action of the parts above. When unnatural flexures are thus formed, or natural ones increased, morbid accumulations are more readily and more frequently produced—and, when once formed, very dangerous diseases of the colon itself, and of the neighbouring viscera often supervene. It is true that, during the life of the patient, we have no symptoms indicating the existence of this condition, which may not equally proceed from other kinds of disorders. The treatment, however, which is applicable to this derangement is also appropriate to others seated in the same viscus which are manifested by similar signs and characterised by alvine obstructions. We shall briefly notice one of the cases detailed by our author.

CASE 1. DISPLACEMENT OF THE CÆCUM AND COLON.

J. Clayton, aged 19 years, a soldier in the Madras European Regiment, July 1819, complained of troublesome cough and expectoration, acute pain in his chest on coughing, very small pulse, skin natural, giddiness, tongue moist and loaded. He had been ailing for six months, and had common remedies applied. He was attacked the evening before the date of report with vomiting and purging of green matter. Calomel was administered, leeches were applied to the sternum, and various means were used; but the symptoms above-mentioned continued, and indeed increased, till death put an end to his sufferings on the 7th of August. The dissection we shall give in Mr. Annesley's words.

"A considerable degree of vascular action appeared over the whole intestinal canal, particularly in the lower part of the ilium. The cæcum was thrown completely out of its place into the centre of the pelvis, immediately over the pubes, and was very much distended with flatus. The ilium was drawn round into the right iliac region, occupying the place of the cæcum, and entering it on the right side. On laying open the cæcum and caput coli, we found a membranous septum between the cæcum and head of the colon, which, although it did not occasion a complete obstruction, yet the passage must have been considerably interrupted. The coats of the intestine were covered with very dark spots, but there was no ulceration. From the sigmoid flexure to the extremity of the rectum there was considerable inflammation on the external coat; and on laying open and exposing the internal surface of this part of the bowel, it was found covered with similar spots to those which were observed at the head of the colon: there was no ulceration, but the coats were of a gristly hardness. The small intestines were generally of a healthy state; but in the peritoneal coat there was the appearance of considerable vascular action, though not amounting to inflammation. The external coat of the stomach was not in any way changed; but in the villous coat there was considerable vascularity, and about two or three inches from the cardia there was a spot of a verdigrise-green colour, which appeared more like a stain than sphacelation, the part being of firm consistence. The gall-ducts were open, and we were enabled to pass a probe through them

into the gall-bladder, which was loaded with dark-coloured, thick bile. The liver was in general healthy, though there appeared some congestion in the right lobe. The kidneys, spleen, and pancreas, were natural. The mesenteric glands were enlarged. In the lungs there was much congestion in the posterior part, perhaps from gravitation of blood. The heart, externally, appeared natural; but on laying open the left auricle and ventricle, we found both loaded with a mass of coagulable lymph, which was so intimately interwoven in the columnæ carneæ, that it must have deprived the heart of the power of receiving its proper quantity of blood; and this may account for the singular oppression and want of pulse described during the treatment of the case. In the head there were signs of some congestion, and considerable arterial action, but no water."

A number of other cases follow, but we are unable to analyze them in this place.

LVIII.

REFLECTIONS ON THE MORBID PHENOMENA CAUSED BY THE USE OF IODINE. BY DR. JAHN.

The author of this paper, published in the Journal Complem. for Feb. 1830, informs us that in the part of country where he resides, there prevails a species of bronchocele which, to all appearance, is a simple hypertrophy of the thyroid gland. He affirms that this affection is never seen where the water springs from ground that is basaltic, porphyritic, granitic, or gravelly; whereas it is constantly observed where the waters issue from calcareous soils, and contain a quantity of lime in mixture. Iodine is the remedy which is generally employed for bronchocele in this part of the country, and he has had ample opportunities, he says, for remarking its effects on the animal organization.—Orfila shewed that this powerful medicine, in large doses, occasioned pains in the stomach, malaise, vomiting, diarrhœa, syncope, oppression, ptyalism, tremors, &c. Symptoms of this kind were observed by our author in a man who had swallowed by mistake, an inordinate dose of the tincture of iodine. In other cases where the medicine was merely continued longer than proper, Dr. J. was struck with the slow but great absorption of fat, preceded and accompanied by an augmentation of all the secretions and excretions. He observed the skin became dark-coloured and the perspiration viscid—the breathing embarrassed—the urine abundant—the bowels loose and very bilious—the catemenia in (females) more copious. From these phenomena our author argues that the functions of the venous and absorbent vessels are much increased, in proportion as the nutritive system has been diminished. The blood, he says becomes thinner than natural, and less abundant in fibrine. If the medicine be continued, in these cases, various bad consequences ensue. He mentions two cases where he opened the bodies of patients who laboured under the excessive use of iodine, and where the emaciation was extreme, and the viscera in a very flabby state. Still Dr. J. considers the medicine in question as one of the most valuable which has been discovered within the last hundred years. Indeed he terms it "an remede divin."

In scirrhus of the pylorus Dr. J. affirms that iodine has sometimes removed the malady, when early applied, and when aided by leeches. The same has been stated by Wagner, Henneman, Hufeland, and others. We would strongly recommend the medicine in question to be tried in dropsical cases dependent on visceral obstructions.

LIX.

CARDED COTTON TO BLISTERED SURFACES.

Dr. Merrill, of Natchez, in America, communicates to the editor of the North American Medical and Surgical Journal, the good effects of cotton, when applied to blistered surfaces, immediately after the blister is removed. The layer of cotton should be half an inch, or more, in thickness, and

sufficiently large to insure absorption of the discharge. In two days, under ordinary circumstances, a new cuticle will be formed, and the blister healed. This dressing gives no pain, and is very convenient in many cases, whether the patient be confined or not to the house.

LX.

ANATOMY BILL. MR. GUTHRIE'S LECTURES.

In a late lecture at the College of Surgeons, Mr. Guthrie took occasion to dwell at considerable length on the subject of dissection, and the difficulties thereon attendant. We find that Mr. G. is of the same opinion with ourselves, as to the supposed stigma of murderers being given up for dissection. We verily believe that this stigma has not the slightest operation in generating a horror of anatomy in this or in any country. The following is unanswerable.

"In Ireland, I believe, those invested with judicial functions well know, that when a man is ordered to be executed, his nearest relations entreat those functionaries, in the most earnest manner, in order to prevent the body from being given to dissection. In no country in the world is dissection more freely and more fairly carried on than it is at this moment in the city of Dublin. Whilst it is endeavoured to be instilled into the minds of the profession here, that it is because murderers are dissected that subjects are not to be procured, we find that the profession in Dublin take an opposite course. We find that they are fully convinced and satisfied that it has no influence upon the public mind. We find that there is no place where bodies are obtained so readily; (they are obtained almost for nothing;)—there is no fear of dissection; they are capable of doing as they please;—yet we find them actually selecting the bodies of murderers—not only seeking them for dissection, but publishing, in the face of the whole country, the experiments performed upon them. But if any ground of suspicion that the prejudice depended on the anatomizing of murderers were entertained, this would be most indiscreet, and might put a stop to the freedom of dissection which at the present moment prevails in Dublin. We find, on the contrary, that they not only open these subjects, but perform experiments upon them, and publish the result in the newspapers. We see that they are not afraid of these descriptions going forth, and we may therefore reasonably and fairly suppose that there is an error upon this subject."

In a celebrated article in the Quarterly Review by the late Dr. Gooch, it is said—"let the profession refuse to dissect the bodies of murderers, and throw that obstacle in the way of the laws:—let them refuse to do what they are called upon to do, and it must be abandoned." But it is to be remembered that the charter of the College of Surgeons is held by the tenure that they shall find a place for the dissection of murderers. We believe that the abolition of the said law would do nothing for the removal of the difficulties under which practical anatomy now labours—nor would its abolition be attended with any inconvenience.

Mr. Guthrie has passed a sharp criticism on the defective points in the late bill, and has shewn, in a very clear manner, the grounds on which the College of Surgeons raised their objections to its enactment as a law. As we know, from tolerably good authority, that either the bill of Mr. Warburton will not be presented at all, or, if presented, that it will be divested of its objectionable clauses, we shall not enlarge on the defects, which Mr. Guthrie has so forcibly criticised. The principal grounds of the College opposition to the bill were—the majority of non-professional commissioners—(an enactment that indicated a distrust of the honourable conduct of the medical commissioners)—the imposition of a tax of 5 guineas upon every person who taught publickly the art and science of anatomy—(a tax that subjected a private surgeon to a penalty for improving himself in anatomy by private dissection, unless he took out a license for such dissection)—and, lastly, the clause requiring interment of the body dis-

sected—an impossibility under ordinary circumstances. Mr. Guthrie taxed the late bill, in pretty strong terms, as being liable to the imputation of saying things which it did not mean, and meaning things which it did not say. We believe Lord Althorpe means to bring in a bill simply to legalize the sale of dead bodies, unclogged with restrictions and technicalities.

The remaining lectures on anatomy and physiology were, lecture 2, on the anatomy of the bones of the pelvis, not only with relation to the differences between the sexes, but on the peculiarities and capacities of the female pelvis, and on the different motions of the head of the fœtus during the parturition. The views of Cowper and others, in relation to the gradation of the form of the head from man down to the monkey were noticed, and the principle applied to the pelvis; the differences of form, shape, and structure between the male and female of the European, as compared with the African, the Hottentot, the East Indian, and down to the Ourang Outang, were demonstrated, and the gradation was then carried through several races of animals, from the common climbing bear to the polar bear, and down to the marsapial animals, such as the kangaroo. The peculiarities attendant on the use of their bones were noticed, and the whole illustrated by numerous diagrams and drawings.

The third, fourth, fifth, and sixth lectures were on the anatomy of the kidneys, ureters, and bladder in man and in animals; the differences in situation between the soft parts in the male and female pelvis:—On the anatomy of the urethra and external parts, and on the introduction of instruments into the bladder.

LXI.

HUNTERIAN SOCIETY.

In the annual report of this Society's meetings, we find an animated appeal to the profession on the advantages of medical associations of this kind; and we wish the appeal may produce the desired effect of stimulating the members of our profession to more union and cordiality than have hitherto prevailed. "By free conference," say they, "and discussion among men varying in their talents and bias, difficult points are most successfully elucidated. The subject is represented in all its forms and bearings: one individual supplies light from past ages—another from the purer sources of the present—and all combine the testimony of their own observations and experience. In this way, occurrences related to one another, but having appearances of dissimilarity—and others seemingly analogous, but widely different—are seen in their true characters; so that obscure and mistaken facts, of high importance, which otherwise would have been lost, are made subservient to the knowledge and treatment of disease."

A prize is offered by the Society for the best paper on tubercular diseases.

LXII.

NORTH OF ENGLAND MEDICAL AND SURGICAL JOURNAL.

We have just received the prospectus of this new contemporary, which is to be in the quarterly form, and to consist almost entirely of original communications. The address is written in an excellent tone of feeling. The journal is to be "exclusively devoted to science, to the total exclusion of *party politics and personal allusions*, and it will be its constant aim to cultivate that *high tone of moral feeling and mutual respect*, which should ever distinguish the members of a liberal profession." This looks well; and we do hope that the members of our profession in the great northern counties will cordially support by their contributions, a work whose objects are so dignified and useful. The first number will appear this Spring, and four numbers (price 2s. 6d. each) will constitute a handsome octavo volume. We observe that communications are to be addressed to Mr. Sowler, bookseller, Manchester, or Mr. Knight, bookseller, Leeds. We shall be happy to give our new contemporary every facility and assistance in our power.

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3. A new Supplement to the Pharmacopœias of London, Edinburgh, Dublin and Paris; forming a complete Dispensatory and conspectus, including the new French Medicines and Poisons; with Symptoms, Treatment, and Tests, &c. By J. RENNIE, A.M. A.L.S., &c. Octavo, pp. 488. London, 1829.

☞ *This edition is revised and considerably enlarged—and thus rendered much more useful.*

4. A Treatise on Poisons, in relation to Medical Jurisprudence, Physiology, and the Practice of Physic. By R. CHRISTISON, M.D. Professor of Medical Jurisprudence and Police in the University of Edinburgh, &c. Octavo, pp. 698, 1 Plate. Edinburgh, 1829.

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☞ *A very useful little book to students, to whom we recommend it.*

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☞ *A very convenient little edition of the excellent work of Cornelius Celsus. Those students who are qualifying for Apothecaries' Hall will appreciate the Work, no doubt.*

15. A Manual of the Economy of the Human Body in Health and Disease; containing a brief View of its Structure and Functions, and the Diseases to which it is liable; with ample Directions for the Regulation of Diet and Regimen from Infancy to old Age. For the Use of General Readers. Octavo, pp. 417. Edinburgh, 1830.

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☞ *An improved edition of a useful Work.*

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☞ *The author believes he has discovered a Method or Methods of reducing Dislocations of the Humerus, superior to any now in use. We have heard, also, that he has been very successful. But the work is insusceptible of analysis, and cannot be understood without the engravings. Our surgical brethren, therefore, must have recourse to the original—an* ORIGINAL *in every sense: for, although on the dull and painful subject of dislocations, Mr. Roberts' book kept us convulsed with laughter for an hour by the clock.*

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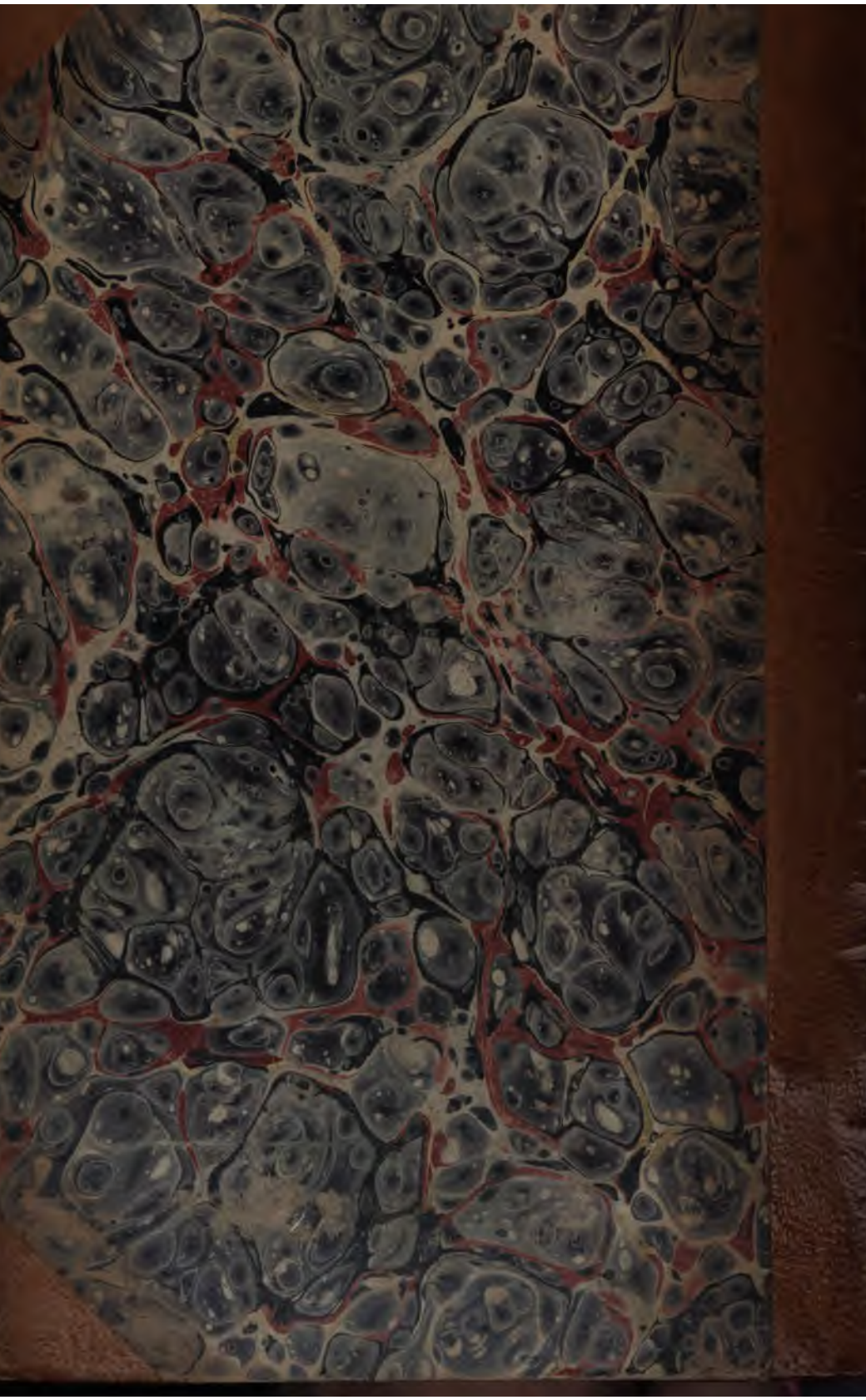
ERRATUM.

We find we have been lead into some error, or rather misconception, at page 390 of this Number, respecting Dr. Dill's case. It appears that it was in a subsequent relapse, not described by Dr. Smith, that we saw Dr. Dill, and expressed our opinion that further depletion was unnecessary. The symptoms, however, were precisely those which Dr. Smith has described—namely the feeble and intermittent pulse, cold skin, blanched face, &c. Our objections to the operation of bleeding, therefore, under such circumstances, are not in the slightest degree altered. The error to which we allude was occasioned by the confused and imperfect account of the case which Dr. Smith has given.

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